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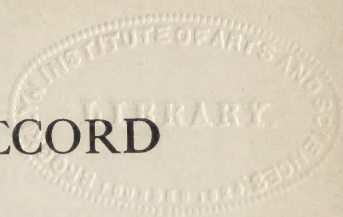
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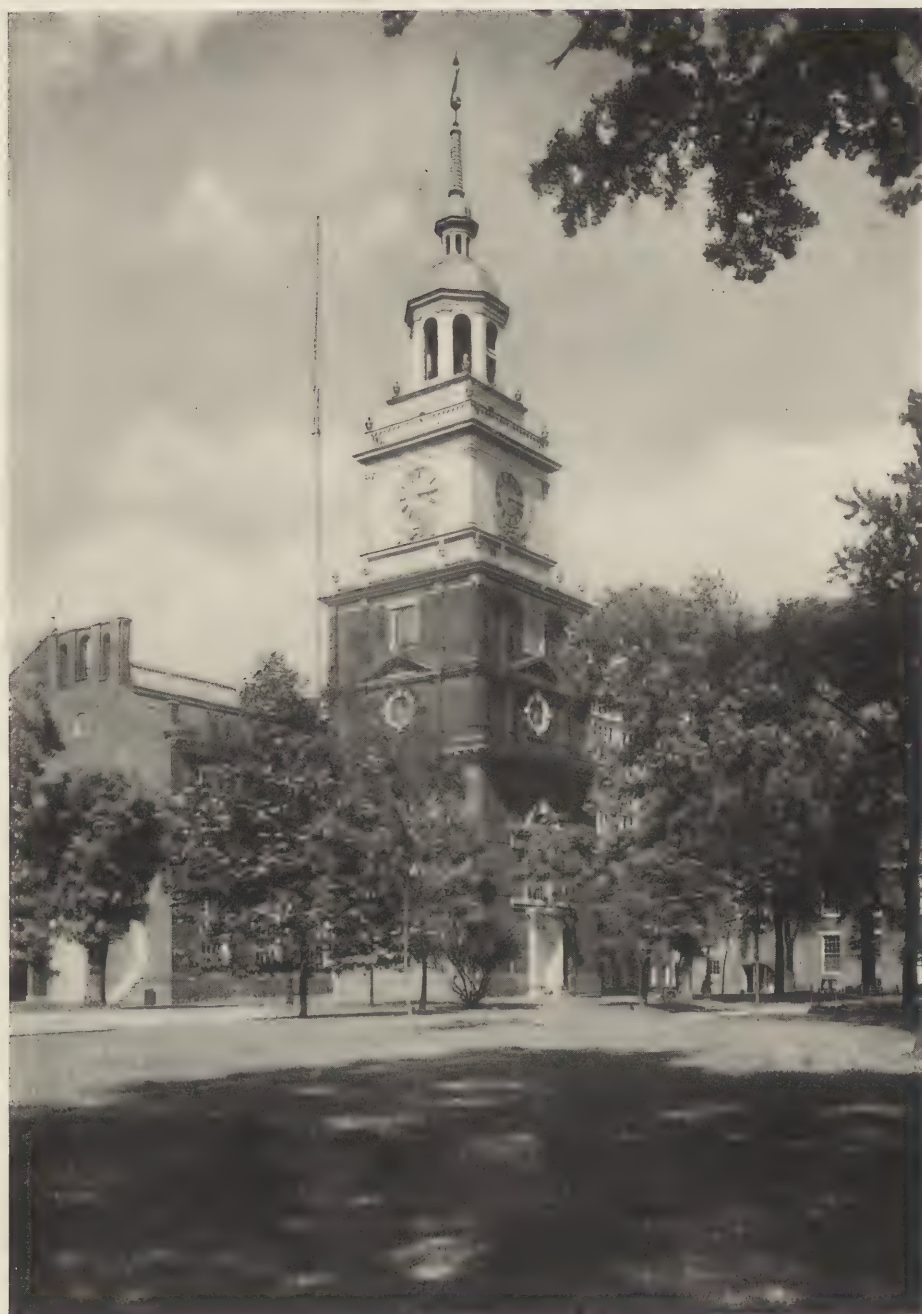
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INDEPENDENCE HALL, PHILADELPHIA, PA., THE SOUTH FRONT.

THE ARCHITECTURAL RECORD

VOLUME XXXV

JULY, 1913

NUMBER I



OUR EARLIEST CIVIC CENTER

The Independence Hall Group
in Philadelphia

By Thomas Brabazon

Photographs by Ph. B. Wallace



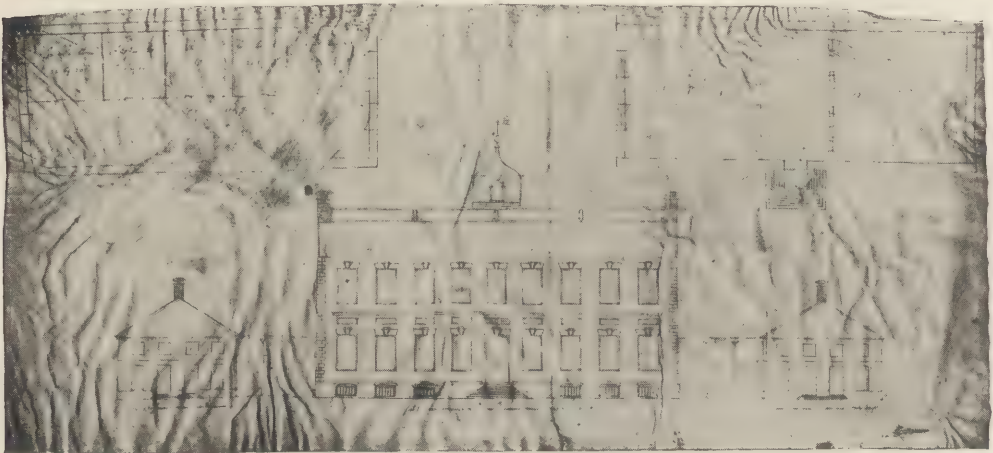
TO most of us, unfortunately, Independence Hall in Philadelphia has little meaning or association beyond the fact that it is the visible memorial to all Americans of the Nation's birth on July 4th, 1776. That the venerable building was the cradle of our nationality is a sufficient claim to the affection and reverent esteem of all loyal citizens of these United States, it is true, but those who are ignorant of or inattentive to the part

it played and the stirring events enacted within its doors or around its walls, both long before and long after the signing of the Declaration of Independence, miss a wealth of historic association thrilling and picturesque.

However, it is not only Independence Hall that commands our present attention, but the whole notable group of buildings of which it is the central and most important. They are all connected with events of the greatest moment in the early life of our Nation. While Independence Hall or the State House, as it is still affectionately called by Philadelphians and doubtless always will be, was our earliest civic and national centre

in that it was the scene of the formal sundering of the last links of British control over our Colonial forebears, the sessions of the Continental Congress, when expedience did not dictate temporary quarters elsewhere, and the framing of our Constitution, it must not be forgotten that when the national government returned again to Philadelphia, after a brief sojourn in New York, the Senate and House of Representatives sat in Congress Hall at the southeast corner of Sixth and Chestnut streets while the Supreme Court occupied the corresponding building at the other end of the State House group, at the southwest corner of Fifth and Chestnut streets.

it would be equally notable and imposing had it been built only yesterday. The scale is so broad and impressive that it dwarfs other buildings of far greater size and loftier stature in the vicinity. In this respect it is comparable to a small person of large presence and much dignity the scant measure of whose inches is not accounted in the impression created among his fellows. We have all seen such. Though the actual area covered by the State House is inconsiderable—it is only 100 feet long by 44 feet in depth with a tower on the south side or rear measuring 32 feet by 34—there is such amplitude of proportion in the rooms, the size of all essential features



THE ORIGINAL PLAN OF INDEPENDENCE HALL, BY ANDREW HAMILTON.

Quite apart, however, from all considerations as our earliest civic centre and the historic associations of paramount national importance therewith connected, Independence Hall and the adjacent buildings flanking it to the east and west have an absorbing architectural interest. Let us first take a survey of the fabric of all three as they are to-day and then glance briefly over the chiefest events in their history, noting, at the same time, some of the vicissitudes of change and restoration they have undergone in the passage of the years.

From an architectural point of view, the State House was a notable and imposing structure when it was erected in 1733 and from the same point of view

and the detail of ornamentation that a visitor instinctively feels himself in one of the great buildings of the country altogether independently of the brave memories by which its halls are hallowed.

Seen from without, it is a most satisfying piece of Georgian architecture. The north front, pierced by a central door and eight broad windows on the lower floor and an unbroken range of nine windows on the upper, has the convincing charm of co-ordinate dignity and simplicity. The doorway is severely plain and of proportions characteristic of the date at which the edifice was built. The wide muntins of the small-paned windows, the well-placed string



THE PALLADIAN WINDOW OVER THE SOUTH ENTRANCE
OF THE STATE HOUSE ("INDEPENDENCE HALL").



THE TOWER ON THE SOUTH FRONT OF
THE STATE HOUSE ("INDE-
PENDENCE HALL").

courses and the oblong panels of blue soap-stone beneath the windows of the second floor agreeably diversify the wall surface and impart a grace that quite prevents the impression of dumpy stodginess that less carefully managed Georgian façades occasionally give. A white

balustrade, running the length of the building and set where the pitch of the roof breaks into a much flattened gambrel to form a deck, affords an additional note of grace and lightness comporting well with the triple chimneys with arch-joined tops at each gable end.

The contrast between the deep red brickwork of the tower, carried one stage above the cornice of the body of the hall, and the white wooden superstructure for the clock, surmounted by an open cupola over the bell, is striking and particularly effective viewed from the south on a sunny morning in winter or early spring, when everything is fretted with a laced pattern formed by the bare branches of the surrounding trees. In the second stage of the south side of the tower, immediately above the door, is a Palladian window that has always compelled admiration. The crushed capitals of the pilasters and dividing pillars, though perhaps rude in line and execution, are delightfully suggestive of the weight and solidity of the tower above them. Grotesque heads and faces as ornaments for keystones were not very extensively used in our Colonial Georgian architecture, but over the windows on three sides of the uppermost brick stage of the tower are faces that for pathos of expression can quite match those on the tower of Christ Church. Though noticed by few among the thousands that daily pass by, they are worthy of attention.

The warm tone of the walls is especially pleasing. Years and weather, yes, and dirt, have imparted an exceedingly mellow tinge to the hard burned brick laid in courses of Flemish bond, and although the glazed black headers, found in so many old houses are of rare occurrence, the hue of the Colonial bricks is peculiarly rich. Relieved as the masonry is by trimmings of native bluish soap-stone and penciled by weathered mortar joints, the walls have a wonderful quality of texture and color.

Although the triple-arched arcades and low, hip-roofed buildings on either side of the State House are new, they are restorations and conform to the provisions of the original plan. That plan



DETAIL OF THE DOOR TO "THE INDEPENDENCE CHAMBER," INDEPENDENCE HALL, PHILADELPHIA, PA.



DETAIL OF A CORNER OF THE FIRST FLOOR
CORRIDOR, INDEPENDENCE HALL, PHILADELPHIA, PA.



CORNER OF WEST CHAMBER, LOOKING INTO CORRIDOR, INDEPENDENCE HALL, PHILADELPHIA, PA.



STAIR DETAIL, INDEPENDENCE
HALL, PHILADELPHIA, PA.



STAIR DETAIL, INDEPENDENCE
HALL, PHILADELPHIA, PA.



THE WEST CHAMBER, INDEPENDENCE HALL, PHILADELPHIA, PA.



UPPER STAIRWAY IN TOWER OF INDEPENDENCE HALL, PHILADELPHIA, PA.

called for such structures, and they were begun several years subsequent to the commencement of work on the main portion of the State House, but gave place at a later date to the hideous barracks, devised to meet the exigencies of public business, which endured till the last wave of restoration happily removed them.

At the extreme east and west ends of the group, the two buildings projecting farther toward the street than the rest, are decent in appearance, but have not the architectural comeliness that distinguishes Independence Hall. Of their historic importance we shall hear later; their fabric claims our attention first. They were not erected till several years after the close of the Revolutionary War, but time and the "tender" mercies of public ownership have dealt hardly with them. The many alterations to which they have been subjected, during more than a century of varied uses, have sadly marred their aspect though, fortunately, not beyond remedy, and it is gratifying to note that Congress Hall, the westernmost of these two structures, is now undergoing a most thorough and scrupulously exact restoration under the care of the Institute of American Architects. When it is brought once more to its pristine estate it will be a worthy member of the noble group to which it belongs. Its eastern companion at Fifth street, for nearly ten years the seat of the United States Supreme Court, is still in a deplorably dingy and dilapidated condition and ripe for such intelligent restoration as has befallen Congress Hall. Both places have a certain dignity of line and the proportions are agreeable. Of architectural embellishments, such as the State House can boast, they are quite innocent save the cupolas which are good. The home of the American Philosophical Society, directly to the south and fronting on Fifth street, really forms part of the State House group and, though not remarkable for any special architectural merit, is unobtrusive and open to no particular objection as it harmonizes with its fellows and derives distinction from the august body it shelters.

Taken as a whole, the State House group is impressive alike from its historic eminence and its intrinsic worth.

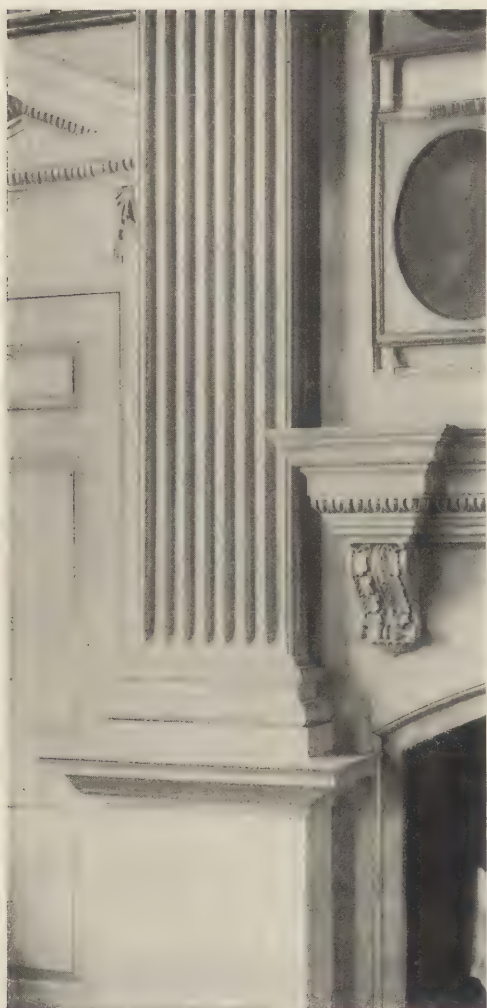
Its composition is interesting and its setting advantageous, occupying as it does the whole north side of Independence Square or the State House Yard, as it used to be called, thus having a large open space to the south whence the ensemble may be properly appreciated. The square itself in its present condition is in no wise remarkable save for some fine old trees planted more than a century since. Comprehensive plans are on foot, however, to embellish it and make it more worthy of the structure along its northern boundary.

Now let us turn to the story of the buildings and, at the same time, note some of the stirring and important events in which they have figured. Beginning this survey at the very outset of Pennsylvania's Provincial history, we find that the Assembly, upon the occasion of its first meeting in Philadelphia in 1683, probably sat in the Blue Anchor Tavern in Dock street, as there was no other public building to accommodate them at that time. Thenceforward they continued to sit in various places as convenience dictated until, in April, 1729, "the citizens of Philadelphia presented a petition to the Assembly that it would by law empower the city and county to build a State House in High Street (Market Street) near the prison." After some of the usual bickering between the Lieutenant-Governor and the Assembly, it was enacted that "the sum of two thousand pounds of bills of credit made current by this act be delivered by the trustees to the loan office to Thomas Lawrence, Andrew Hamilton and John Kearsley, who are hereby appointed for building and carrying on" the State House, whose erection had just been determined upon.

Thus was a beginning, at least, made towards establishing the future cradle of American independence. Land was secured, not on High or Market street as suggested in the petition to the Assembly, but on Chestnut street, one square to the south, between Fifth and Sixth, a site then so far beyond the built-up part of the city that it seemed "like a citadel without the walls" and children jealously watched it rise from the fields where they were "wont to go a-berrying."



DOORWAY FROM CORRIDOR INTO BASE OF
TOWER, INDEPENDENCE HALL, PHILADELPHIA, PA.



A DETAIL IN "THE INDEPENDENCE CHAMBER," INDEPENDENCE HALL, PHILADELPHIA, PA.

Two members of the committee appointed by the Assembly prepared plans for the new building, Andrew Hamilton and John Kearsley, neither of them architects. John Kearsley, it is true, had achieved considerable reputation in this respect by the plans he had devised for Christ Church, but Hamilton was not supposed to have any particular aptitude in that direction. He was a lawyer much occupied in the public business of the Province. Like so many other eminent legal lights of the Middle and Southern Colonies, he had been trained in the English Inns of Court, and while in London

had mastered, it seems, some architectural knowledge. Being a man of remarkable and sterling ability, combining with his wide versatility and breadth of view a goodly share of initiative and force, he generally pushed to a successful completion any matter to which he seriously addressed himself. His plan, a rough draft of which on parchment may be seen in an accompanying illustration, was submitted to the Assembly and chosen. Of his excellence of taste and soundness of judgment we have an enduring witness today in the fabric of the State House.

Work on the State House was indeed begun and vigorously pushed by Hamilton as far as he was able, but there were all sorts of obstacles to be surmounted and drawbacks and hindrances to be set aside. There were grumbles and growls from influential people who were either wholly opposed to the undertaking or else dissatisfied with the site, there were unfavorable criticisms of the plan adopted, there were strikes, there was lack of competent labor, there were wranglings about the necessary funds to pay the costs—everything, in short, combined to retard progress, and Hamilton died in 1741 before his plans were fully executed. After the main portion of the State House was under course of construction, it was decided to erect at each side a triple-arched arcade and low hip-roofed building, as designed in the plans. The two small buildings were to be devoted to the safe keeping of the public records.

The State House itself was designed to accommodate the legislative and executive branches of the government. The great east room, to the left of the door on entering, was intended for the use of the Assembly. Whether the west room across the corridor, and communicating with it by three large open arches, was originally meant for the Supreme Court of the Province is uncertain, but, at any rate, it was in time appropriated to that purpose. The second floor has a long gallery running the full length of the building along the north side facing Chestnut street, and this apartment has



A DETAIL OF THE MANTEL IN "THE INDEPENDENCE CHAMBER," INDEPENDENCE HALL, PHILADELPHIA, PA.



WEST CHAMBER, THE SUPREME COURT ROOM, INDEPENDENCE HALL,
PHILADELPHIA, PA.

been variously designated as "The Long Room," "The Banqueting Hall" and by sundry other titles. Facing the south are two smaller rooms, separated by a spacious hallway or lobby which also opens into the Long Room. One of these lesser rooms seems to have been intended for the use of the Governor's Council.

The tower was not contemplated in the original design and was not planned till 1749, eight years after Hamilton's death, and not finished till November, 1751, when a feast was made for the workmen employed in erecting it. As the tower contains the stairway and only means of access to the second floor, we cannot tell how the upper apartments were reached before it was built.

The tower being completed, it was deemed desirable to have a bell and clock, which were accordingly set in place. The first clock's works were in the centre of the building under the roof and the dials were in the round windows in the gables at the east and west ends, the hands be-

ing attached to long rods that traversed the distance from the works to the faces. It was not until many years later that the clock and dials were set in the tower. A singular fatality seems to have attended all the bells intended for the State House. They have all required several castings.

In 1774 the woodwork of the upper part of the tower was found to be in a decayed condition and it was ordered taken down and a covering put over the brickwork to save it from damage by the weather. Nothing was done, however, till 1781, when a low hip roof was constructed immediately above the brickwork. The tower was not restored to approximately its original condition till 1828, when it assumed its present appearance under the direction of William Strickland.

Notwithstanding the building troubles that often confronted the superintendents or building committee of the State House and the occasional lack of compe-



DETAIL OF LOWER PART OF STAIRWAY,
INDEPENDENCE HALL, PHILADELPHIA, PA.

tent workmen, the fabric was well and truly joined together. It is a satisfaction to know that the names of the master workmen have been preserved. Especially worthy of mention are Bryan Wilkinson, who did the fine wood carving, Thomas Godfrey, one of the glaziers, entitled to fame as the inventor of the quadrant, while no less a person that Gustavus Hesselius, the portrait painter, had a hand in painting the woodwork. For a season he laid aside his palette and brushes and labored with the paint pot.

Having thus traced the evolution of Independence Hall's fabric, it will not be amiss to recall a few of the incidents that have served to render it a memorable and conspicuous object in our national history from the middle of the eighteenth century onward. From the outset it was regarded with affection and pride by the citizens, barring the few malcontents and grumblers who opposed its erection. Apart from the special purpose for which the State House was built, the accommodation of the officials and legislators of the Province, it was often put to other and lighter uses and many were the banquets and balls held under its roof. As far back as 1736 Mayor Allen gave a feast for the citizens at the State House and from thence onward state dinners and routs were celebrated until the memorable collation of 1774, when the members of the Continental Congress, then sitting in Carpenters' Hall, were the guests of the gentlemen of Philadelphia. This was probably the last occasion of the kind to be held there.

Between the years 1768 and 1773 a number of meetings were held either in the State House or the State House Yard to oppose Townshend's revenue acts and a strong non-importation agitation was kept up. In July, 1769, a vessel laden with malt arrived in port and straightway a meeting was called at the State House to determine what was to be done. The brewers attended in a body and swore they would not buy nor brew the malt for anyone, and so the unwelcome cargo was shipped back to England without being unloaded. A more interesting and important gathering occurred at the State House in October, 1773, when ex-

citement was rife over the expected arrival of a fresh consignment of tea from the East India Company in the ship *Polly*. On October 16, a "large and respectable town-meeting," presided over by Dr. Thomas Cadwalader, was held there and spirited resolutions anent the tea question were enthusiastically adopted. The same resolutions were immediately afterwards adopted, nearly word for word, by a town-meeting in Boston (November 5, 1773), a fact deserving emphasis because the opposition to the Tea Act began in Philadelphia and not in Boston, as is popularly supposed. When the teaship was actually sighted in the river, a town-meeting was called at the State House on an hour's notice—it was so crowded that the people had to adjourn to the adjacent Yard—and it was forthwith resolved that the captain should "neither enter nor report his vessel at the Custom House," and should "carry back the Tea immediately." He was allowed to stay in the city till the next day to get necessary supplies and was then packed speedily off. Thus, at the State House, ended Philadelphia's tea episode without any noisy outburst or tumult.

The sitting of Congress in the East Room of the State House and the signing of the Declaration of Independence in that chamber are too well known to require more than passing allusion. In that same Independence Chamber, Congress continued to sit during some of the darkest days of the Revolution, and in that very same chamber also, in the summer of 1787, sat the Constitutional Convention, and there on September 17th they signed the document that we have been taught to regard as the bulwark of our liberties.

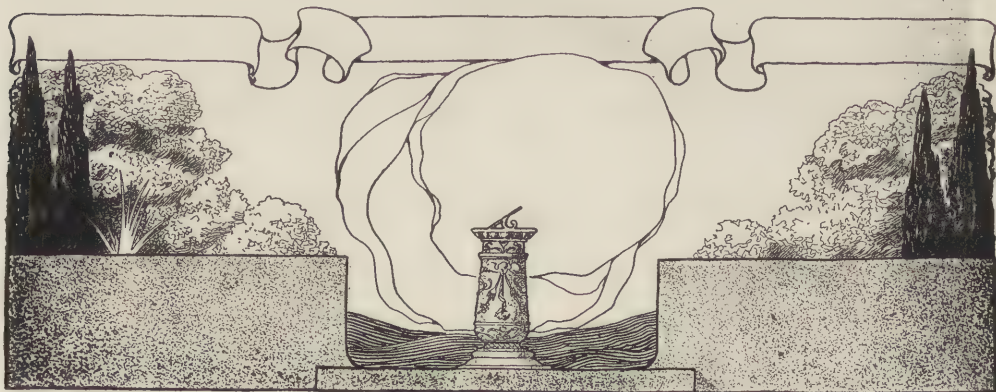
In this connection it ought to be remembered that a dramatic incident that was not without its effect in conquering the strong opposition that existed in some quarters to assembling the convention, was enacted before the State House. In June, 1783, before the army had been disbanded three months, a body of about 80 mutinous soldiers of the Pennsylvania line, goaded by privation and long-delayed payment, marched from Lancaster to Philadelphia. They halted before the

State House, where Congress was then sitting, and, after a nip of rum to prime their spirits, attracted the attention of that august body by shouts, hurling stones and aiming their muskets at the windows. Unless their arrears of pay were then and there handed over, they vowed they would take the members of Congress and hold them for ransom or else loot the bank where the Federal funds were kept. Congress in dismay appealed for protection to the Executive Council of Pennsylvania then in session in another room of the State House. President Dickinson, however, feared that if he called out the militia they would join the rioters. The city authorities declined to intervene in the affray and the citizens did nothing. Congress, perforce, beat an ignominious retreat to Princeton and took refuge in the College.

Congress Hall, at the corner of Sixth and Chestnut, was erected in 1788 for city and county court purposes. In 1791 the old City Hall at the corner of Fifth and Chestnut streets was built. When the seat of national government was moved to Philadelphia, the building at the corner of Sixth street was assigned to Congress and the third session met there, the House of Representatives occupying the first floor and the Senate the upper.

In this building Washington's second inauguration took place and here John Adams was inducted into office as President. City Hall at the corner of Fifth street was turned over at the same time to the Supreme Court, and here presided Chief Justices John Jay, John Rutledge and Oliver Ellsworth.

"Where in America," asks one eminent writer, "can be found a similar group of historic buildings?" It is perfectly safe to say that in no other place can we find a parallel, and yet they have not always been regarded with the reverence that is their due. In 1813 the State authorities actually suggested selling Independence Hall, cutting a street through its site and parcelling off the land into building lots! Popular indignation at once stormed out in the city and arrangements were forthwith made by which the city acquired title and so prevented the contemplated sacrilege. Restorations have been made from time to time and each attempt has brought the buildings nearer their pristine state. When the present plans are carried to completion and the measures for the improvement of Independence Square realized, the group of buildings and the ground adjoining will present such an appearance as may well elicit the pride of everyone in our earliest civic centre.





"PHILADELPHIA OF YESTERDAY," AN OLD DOOR-
WAY AND ALLEY ENTRANCE, PHILADELPHIA, PA.



COURTYARD OF THE BLACK HORSE INN, SOUTHWARK, PHILADELPHIA, PA.
A place with the atmosphere of Shakespeare's England.

ARCHITECTURAL PHILADELPHIA YESTERDAY AND TODAY *An Illustrated Retrospect & Review*

By Costen Fitz-Gibbon

Photographs by Ph. B. Wallace



LOOKING back at the failures and achievements of yesterday or the day before is a diversion which finds most of us far too busy with the affairs of today to indulge in. Besides, it is often very disquieting to look back. We see how ill we ourselves have done things and how well others have done them, and it tends to wound our vanity. Nevertheless, if we spend

not too many golden moments doing it nor let it become a too frequent habit, it is a good thing to pause deliberately once in a while and carefully examine what is behind us. It helps us to get a true mental perspective and properly adjust and balance values. An intelligent retrospect has educational worth and ought to supply inspiration to renewed and better effort in our own work.

But a truce to ungracious moralizing. Let us to the feast before us, a review of Philadelphia architecture old and new, and pray the repast disagree not with our digestions. It ought to prove whole-

some for it embraces meats substantial and frivolous sillibubs in rich variety. No other city in America can furnish such abundant and diverse material for an architectural retrospect. No other city in America is so conservative or has kept intact so much of the work of each succeeding period. It is a veritable paradise wherein architects may survey styles past and gone. An examination and comparison of the sundry phases, therefore, ought to supply some food for thought and help us to sift out the chaff of ugly, frivolous and worthless creations and come at the kernel of honesty, sincerity and abiding architectural worth.

Philadelphia architecture divides itself naturally into several distinct and clearly defined periods. The lines of demarcation are unmistakable. To begin with, there is the Georgian and post-Georgian period. All the houses and public buildings erected in Philadelphia during the eighteenth century and very early part of the nineteenth bore a strong family resemblance. However much they might differ from each other in the

several minor types of detail that appeared from time to time, they all had upon them the same general stamp that marked them as essentially English in lineage and tradition and though the Swedish element in Southwark slightly affected structural contour—they “spoke Georgian with a Swedish accent,” as one architectural wit puts it—the traits of close kinship were not at all effaced. The Georgian manner was most elastic and adaptable in its application to meet any demands that might be made of it. It answered equally well for cottage or spacious mansion, market, hospital, village church or lofty city fane. It was equally appropriate and pleasing in every instance, and every instance is admirably exemplified in the older part of Philadelphia.

As already observed, no other American city has such a wealth and diversity of Georgian remains and that, for the most part, in either an excellent or at least a tolerable state of preservation. English architects and artists, on being taken through the old section of the city, exclaim in surprise and declare there is



OLD WAREHOUSES ON DOCK STREET, PHILADELPHIA, PA.



ST. PETER'S CHURCH,
PHILADELPHIA, PA.



THE STREET ELEVATION OF AN OLD HOUSE ON WALNUT STREET, PHILADELPHIA, PA.

The division of the windows is both interesting and unusual.

now nothing like it to be found in England. In its eighteenth century Georgian buildings it is more English than England itself. The British cousins are always particularly amazed at St. Peter's and the fact that it is wholly unspoiled by the hand of the modernizer. There is scarcely a Georgian church to be found in their own country, so they aver, that has not been meddled with and suffered sundry ruthless "improvements" that have quite destroyed the flavor of its architecture. And yet here is old St. Peter's, in the heart of the city with streams of noisy traffic surging past the churchyard walls, absolutely intact with its high square family pews painted white and closed with doors and its stone-paved alleys precisely as they were when His Majesty, King George III. and all the Royal Family were duly prayed for each Sunday by the loyal forebears of many of the present worshippers.

The following anecdote will partly explain, perhaps, why so many old buildings in Philadelphia retain their original aspect. A former rector of St. Peter's,

noticing that the ponderous iron latch on one of the south doors was a trifle loose and worn, ordered it replaced by a modern lock and knob. One of the then wardens, chancing to come in by that particular door the following Sunday morning, discovered the impertinent innovation. In righteous wrath he immediately summoned the head verger and demanded an explanation. "The Rector had it put there," said the verger. "Where's the old latch," queried the irate warden. "In the tower, sir," was the reply. "Put it back!" came the prompt rejoinder. And the very first thing on Monday morning, back went the old latch in its old place and there it still is, a trifle wobbly and time-worn, to be sure, but quite fit for duty. The new lock and knob went into permanent retirement and have never since seen the light of day. All the details of St. Peter's from the chaste cornices, the varied pediments over the six doorways, the massive brick quoins, down to the very latches, have a purity and boldness of line quite captivating to the eye while the charm of the mellow



DETAIL OF A WINDOW FROM AN OLD HOUSE
ON WALNUT STREET, PHILADELPHIA, PA.
Note the Greek fret in the iron rail.



A TYPICAL BY-STREET IN PHILADELPHIA
OF YESTERDAY—"BLADEN'S COURT."
It is difficult to associate this with the present century.



THE OLDER HOUSES OF PHILADELPHIA
POSSESS A DISTINCTIVE CHARM AND A
PICTURESQUE QUALITY OF THEIR OWN.

old structure in the midst of its peaceful, shady churchyard can scarcely be paralleled elsewhere.

Journeying but a little distance away into Southwark or Weccacoe, that district being so called by the Swedes before Penn arrived to found his City of Brotherly Love, we come to the Gloria Dei or "Old Swedes'", as non-Latinists prefer to term it. This little church, built in 1700 to replace an earlier structure of 1677 on the same site, is, of course, pre-Georgian, but it serves well to typify general principles of style and manner, and, more than that, it plainly utters the "Swedish accent" in the extremely steep pitch of its roof and its altogether high-shouldered aspect. The brickwork of the walls is particularly engaging. The Flemish bond is all pyed with black headers that were evidently arch bricks in the kilns and thereby acquired an unusually hard and lustrous blue black glaze. In several spots the masons wrought diaper patterns with the black headers. Details and proportions are worthy of extended notice, but we must hasten on. Church, rectory, verger's house and parish building are all kept in perfect condition. An additional note of interest attaches to this group because the apse at the east end of the church juts out into a busy thoroughfare and is but a stone's throw from the docks and all the attendant bustle of marine commerce. If the reader wishes a Georgian village church to compare with a large urban edifice, let him go to a distant part of the city and examine old Trinity, Oxford, near Cheltenham, and he will find that it has the same breadth of proportion, grace and virile dignity as the stately buildings of Christ Church or St. Peter's.

Returning to within a square of St. Peter's, we find ourselves at the old Pine Street Market, a structure representative of the city as it was one hundred years or more ago. Like many of its prototypes, the English market town halls, it was set squarely in the middle of Second street where that thoroughfare broadens out into a market place, and stretching away in a long line back of it are the sheds for the stalls and shambles. En-

tirely aside from its historic association, the market is interesting in its own right. The relieving effect of the white string course on the dark red field of the wall emphasizes the importance of that device as a factor of ornamentation. The old builders knew that this single feature would often transform a very plain building into a very striking one and used it with excellent results in such cases, notably, as the wings of the Pennsylvania Hospital. The market otherwise unadorned, save for its cupola and the simplest of lintels and cornices, and dumpy in proportions though it be, bears a convincing air withal and imparts a distinction to its surroundings which they certainly would not possess were it demolished, as it was in danger of being had not the vigorous protests of historical and patriotic organizations coupled with the timely efforts of the Institute of American architects intervened to stay the iconoclastic hand of ultra-modern "improvers." For further worthy examples of Philadelphia's eighteenth century public buildings we may point to Carpenters' Hall, Christ Church, Independence Hall, the Pennsylvania Hospital and others.

Dwelling houses built in this same style now claim our attention for a space. A ramble through any of the old portions of the city will reveal dozens of delightful examples. Sometimes one has the pleasure of a vista down a narrow little street whose sides are lined with small houses of the type shown in one of the accompanying illustrations. In the majority of cases, the walls of houses both big and little show the characteristic black headers alternating with red stretchers in the courses of Flemish bond which was used almost without exception. The usual building material was brick. In Germantown and Frankford, and the suburban districts not then included within Philadelphia's limits, stone was largely employed, it is true, but in the city itself brick was practically universal.

Cornices of all sorts are to be found. Sometimes they are of plaster in a broad, sweeping cove with small mouldings at top and bottom, again they are composed



"GLORIA DEI," OLD SWEDE'S CHURCH,
SOUTHWARK, PHILADELPHIA, PA.
One of the earliest churches in America, built
in 1700.

of deep and carefully proportioned mouldings while still others are garnished with sundry applied forms of ornamentation—there is no end to the variety. A difference is noticeable between many of the roofs in the centre of the old city and those in Southwark where there was a large Swedish element. In the latter place the pitch is apt to be much steeper and gambrels are more common, no doubt from a desire to maintain the steep pitch without carrying the ridgepole too high. Other more subtle differences there are, too, that must be seen to be appreciated. Decorative ironwork for balustrades, handrails for steps, lamp standards and foot-scrapers was of interesting pattern and there are some good examples of it still left, notably on large houses in South Third street or on mansions belonging to princely old East India merchants in South Front street.

Strange as it may seem to us of today, few of these houses, creditable as they were, were planned by architects. They were nearly all "carpenter-built." Their excellence, however, can be understood when we remember that some knowledge of architecture and the other arts was then supposed to form part of a gentleman's education, that not a few possessed a measure of taste and ability and, lastly, that house carpenters were masters of far more architectural prowess than is now commonly the case and that they freely availed themselves of the numerous books of detail and plans published for their behoof. We have noted how elastic and well adapted the eighteenth century type was to both public edifices and dwellings. That it was alike suited to abodes of high and low degree we may readily see by comparing the well known Morris house in Eighth street or the Powel house in Third, to mention only two instances, with some of the little dwellings seen in the illustration. The architectural expression was direct and simple and had the dignity and vitality that art unaffected and ingenuous always shows. It was so adaptable and convincing just because it was so straightforward.

In justice to Philadelphia's succeeding architectural phases we must not lin-

ger any longer over this eighteenth century aspect, beguiling as it may be. Before quitting this part of the subject, however, a word of encouragement ought to be given the architectural tramp urging him to poke into all the alleys and by-ways and unexpected places. The time he spends in so doing will be amply repaid in a wealth of delightful finds. It is by just such nosing about that he will discover alluring bits like the Black Horse Inn yard up Second street, or, farther along the same thoroughfare, other fascinating hostelries with similar enclosed courtyards, like their London prototypes, once the scene of life and bustle when great farm wains from the surrounding country arrived for market days or when the mail coaches set out with cracking whip and blast of horn.

The Georgian trend continued with little or no radical change of spirit up to the advent of the Classic revival, an influence that manifested itself about the close of the first quarter of the nineteenth century. This mutation of style was practically synchronous and correspondent with the sway of the Empire styles in furniture. The impetus received by this particular mode of architectural expression was traceable in the first instance to French agency. The vogue of classic fashions enjoyed a marked popularity and spread with such astonishing rapidity that one might have supposed the sole ambition of the builders was to transform the city into a second Athens or Rome. Everywhere could be seen buildings that, if not planned on classic lines, were at least adorned with Greek and Roman orders. This church or bank was embellished with Corinthian columns, that across the street was of severest Doric character while another, perhaps, around the corner rejoiced in graceful Ionic pillars and, doubtless, just beyond was a house whose owner took a proper pride in the impeccable purity of his Tuscan portico.

Sometimes all the orders got inextricably jumbled together on the same edifice and overrun with a veritable forest of acanthus leaves and anthemias and yet, the effect was not wholly bad, however much it might distress a purist, because



THE OLD PINE STREET MARKET.
A structure representative of the city as it
was over a hundred years ago.

the builders, in the exuberance and freshness of their vigor could not help producing some vitality, although they were trying to express themselves in a medium they did not fully understand. These unseemly mixups of architectural botany or botanical architecture, which—ever one prefers to call it, were not of common occurrence it is pleasant to record. They were the exception and served to lend point to the really excellent and creditable things that were achieved at a time when a decorous formality went hand in hand with cultivated taste and not a little vigor of thought.

When the Classic revival began, Philadelphia was still the largest and wealthiest city in the country and, as one might expect, affluence and educated taste were reflected in the buildings that arose from time to time. Many really important things were done during the period of Classic ascendancy and to-day, after years of vicissitude in popular taste, their charm of grace and quiet dignity is still fresh and enduring and constantly reminds us of the courtliness of the generation that wisely planned and achieved them. It has been said, indeed, that Philadelphia has more and better specimens of Greek architecture than any other American city, which is probably true, but as they are scattered over a far wider territory than the important examples of Georgian work, one is not so forcibly impressed with their presence.

Of the public buildings of this period those especially worthy of mention are the Custom House, the old Stock Exchange, the Girard Bank nearby, the main building of Girard College, the Ridgway Branch of the Philadelphia Library and the Naval Home on Gray's Ferry Road. The Chestnut street front of the Custom House with its severe Doric columns has more dignity and presence than any of the large buildings surrounding it and though it is comparatively small, it dominates the whole immediate neighborhood. The old Stock Exchange is far more favorably placed for a satisfactory view as it has in front of it the broad open sweep of Dock street still further widened by the cross-

ing of Walnut street at that point. In various ways the Exchange is somewhat of a hybrid but, all the same, despite any faults or inconsistencies, it is a distinctly impressive structure. Just back of it, at the head of Dock street, is the old Bank of the United States, now the Girard Bank, whose white marble façade, though not without some faults, is always pleasing to look at with its six Corinthian columns and well proportioned pediment. As to the main hall of Girard College, it is worthy of the highest commendation and all the praise that has been bestowed upon it has been fully deserved. Its situation is especially fortunate and the truth of its proportions and accuracy of Corinthian detail are readily appreciated.

It must not for a minute be imagined that the Classic revival was confined to buildings that were ostensibly planned after well known Greek or Roman models. On the contrary, in planning both public buildings and dwellings architects freely availed themselves of sundry features and details drawn from Classic sources and modified or adapted them to suit their individual needs often displaying considerable originality and good taste in so doing. The illustrations showing the Walnut street house and a window detail will indicate the manner in which this adaptation of *motifs* took place. In other instances houses bore no external traces of any influences beyond the plainest Quakerism—the exterior of Wilson Eyre's house, shown elsewhere in this issue, is an excellent example of this—but within flourished out bravely into all manner of pillars and pilasters, fluted and plain, with capitals of all orders, entablatures, cornices, egg and dart mouldings with a perfect wilderness of acanthus, honeysuckle and walls of Troy running riot and vying with each other for precedence. There are rows and rows of such houses. Their spacious old rooms with their pillared black marble mantels and their sometimes overloaded Classic embellishment, whatever their incongruities—and occasionally the incongruities were very glaring—nevertheless possessed a stateliness and repose that we now often utterly fail to attain.



OLD HAND-WROUGHT IRON-WORK IN
PHILADELPHIA OF YESTERDAY.

A fair example of Classic revival influence on a warehouse may be seen in the Dock street picture. The building in question is thoroughly suited to its purpose and yet it is not lacking in comeliness. Among the nearby country seats that best reflect the Classic revival may be mentioned Devonshire House on Township Line, now unfortunately menaced by the onward "march of the proletariat" in the shape of rows of little houses for the laborers in the steel works close at hand, and Andalusia, a fine old house in excellent preservation on the banks of the Delaware some miles above the city.

From the chaste influence of the Classic revival the pendulum swung away in the opposite direction, a reaction set in and about 1850 there began to creep into evidence a spirit of Romanticism which had come over the water from England. There, largely owing to the combined influences of the Waverley novels and the Oxford Movement, the ecclesiastical societies were ardently endeavoring to arouse a renewed interest in Gothic architecture. The effects of their labors gradually came to be felt on this side of the Atlantic and took shape in various forms, some of which were admirable, while other were insufferably bad. By far the best piece of work that the new school of Romanticism accomplished for Philadelphia was the erection of the church of St. James the Less at the Falls of Schuylkill, than which nothing better of its kind can be found in either England or America. It is an absolutely perfect example of a little thirteenth century English village church. The next best achievement in this school was St. Mark's church on Locust street above Sixteenth, which would have been nearly perfect had not the American architect to whom the execution of the English plans had been entrusted taken it into his pate, for some incomprehensible reason, to lower the roof of the choir and cut off much of its length.

Barring these two structures the other attempts at Gothic revival in Philadelphia were depressing and foolish. The congregation of one church, built about this time, fondly imagines that its place

of worship resembles York Minster. Perhaps by an active stretch of the imagination you can call up a vision of York's west front, but there every trace of likeness ceases. Thanks to kindly providence, this church is closely built up to on both sides so that it really doesn't matter very much that it is "Queen Anne in front and only Mary Ann at the sides and back." As to the effect of this movement on dwelling houses there is not much to be said. Beyond one or two houses and cottages that were built with a semi-ecclesiastical bias and duly fitted with diamond paned casements not a great deal was done in this style. The few houses that were so planned were mostly dark and uncomfortable and did not inspire others to go and do likewise. The instances just noted with occasional sporadic cases of barge boards on gables and a foolish little tower or two with pasteboard crenellations, contrived by a handy and imaginative carpenter, about made up the tale of Philadelphia's domestic architectural Romanticism.

What the public escaped by this early decadence of Romanticism no one can tell but certain it is that whatever might have befallen could not have been worse than what actually did come to pass. First there were all the inanities of mid-Victorian drivel, then there were rows of houses with pompous—"pompious" would be a better word—brownstone fronts for the style of which heaven has never yet found a name, after these came the horrid banalities and grotesque gingerbread skyrockets of the Centennial vintage while last and worst of all came the "dreadful 80's". We have all heard of the "loaring 40's" and even though we may forget or never have known what they are, we always remember the name because of its sonorous euphony, but the "dreadful 80's" unfortunately have a more insistent title to our remembrance. Like the poor, we have them always with us or, at least we have the results always with us which is worse for they are so solidly built that they are likely to endure for a long, long time in the ordinary course of events.

Although there are some houses dat-



THE OLD STOCK EXCHANGE, PHILADELPHIA, PA.
An interesting example of the purest "Classic Revival."

ing from this "age of queer things," the chief offences both in point of number and size are in larger edifices for public use. One and all they are very expensive, very ugly and very uncomfortable. They are the very agony of architecture. One always feels sorry in looking at them that so much good building material should have been wasted in a bad cause and one always feels enraged at the specious respectability of these substantial eyesores. They are like the grotesque creature that Horace talks about at the beginning of "Ars Poetica." They have two merits which are doubtful—one must "give the devil his due"—originality and novelty. Original they are for the like of them was never before conceived in mortal brain; novel they were for they antedated the cubists by three decades in arriving at the quintessence of "gobbiness" and angularity.

One of the granite office buildings erected by this remarkable school of the '80's has a yellow brick side wall and a steep copper roof beautifully weathered. Unfortunately the sky has to be of the clearest azure and the sun in just the right position to get any effect, otherwise the sight is fearsome and depressing. Another building, the library of an institution, is apparently a combination of gunboat and conservatory and has all the griffins and gargoyles in Christendom on it. One of the chief offenders in this fairy tale architecture, a gentleman otherwise most cultivated and sane, resolutely refused for years to go abroad for fear of having his architectural ideals contaminated and his strongly individualistic style unconsciously perverted by what he might see on the other side of the Atlantic. After indulging in persiflage at the expense of a particular style



THE ART CLUB OF PHILADELPHIA.

Frank Miles Day, Architect.

A building which imparts an Italian flavor to its neighborhood.

it would be unkind to cite specific examples by name. Suffice it to say that anyone who either lives in or visits Philadelphia cannot fail to know some of the buildings alluded to.

It is always darkest just before dawn and as the fantastic creations of the '80's marked the height of architectural grotesquerie so they also heralded the dawn of a better day. At this time, or not long subsequent to it, came such men as Frank Miles Day, Cope and Stewardson, Wilson Eyre, John T. Windrim, Horace Trumbauer, Charles Barton Keen and others to be followed before many years by a group of younger men among whom may be mentioned Duhring, Okie and

Ziegler, Mellor and Meigs, Brockie and Hastings, Evans, Warner and Register with many more who cannot be duly mentioned for lack of space. These all since the inception of their practice have labored constantly and effectively for the betterment of local architecture. For the advance made in both domestic and public architecture in Philadelphia and the adjacent country too much credit cannot be given them.

Of course each is working in his own individual style, and between these styles there is wide diversity. They are all, however, marked by the utmost sanity, catholicity of appreciation and soundness of judgment. Under the influence



A RESIDENCE AT THE CORNER OF LOCUST
AND JUNIPER STREETS, PHILADELPHIA, PA.
WILSON EYRE, ARCHITECT.

Even in urban architecture Mr. Eyre succeeds in
expressing that quality of the "picturesque" which
is so characteristic of his country-house designs.



THE WETHERILL RESIDENCE, PHILADELPHIA, PA.
Frank Miles Day, Architect.



ADDITION TO THE UNION LEAGUE CLUB,
PHILADELPHIA, PA.
Horace Trumbauer, Architect.

of the able architects now practicing, the general tone of Philadelphia's architecture has become more cosmopolitan and universal. Of course, too, the individual architects all have their shortcomings and they all make mistakes now and again, but the general average of architectural conception and performance has been immeasurably raised.

As to the cosmopolitanism of Philadelphia architecture, it will probably become more pronouncedly so. It is impossible to get everybody to think alike or to have the same kind of taste, and it is not desirable that it should be so. So long, then, as there is this diversity of taste so long will there be diversity of architectural expression. The hopeful aspect of it all is that as the quality of individual performances ascends the total result will become in many respects more harmonious and buildings wrought in diverse modes of architectural expres-



A PHILADELPHIA CITY RESI-
DENCE, 1313 LOCUST STREET.
FRANK MILES DAY, ARCHITECT.
An example of the well-mannered style
of the latter-day Philadelphia archi-
tecture.



A DETAIL OF THE WANAMAKER BUILDING, PHILADELPHIA, PA.
Daniel H. Burnham and Company, Architects.

sion, instead of snarling at each other like savages will be like well bred people of different tastes and views held in check by the amenities of the drawing-room.

As fairly representative of the newer domestic city architecture, one may cite the house at the corner of Locust and Juniper streets, by Wilson Eyre, and another house, next door but one below it, by Frank Miles Day. It would be too long a tale to point out the excellences of even a small number of the newer residences which, it may be added, are replacing the tiresome monotony of the old rows by fronts of agreeable individuality in a diversity of styles. It will, perhaps, conduce more to a comprehensive

conception of the newer side of Philadelphia architecture if we glance at some of the larger buildings that have arisen from time to time during the last five and twenty years.

In the very fore front of the advance must be reckoned the Art Club on Broad street, which imparts a decidedly Italian flavor to its immediate neighborhood despite the proximity of the Bellevue-Stratford and the Ritz-Carlton. A building of entirely different stamp and of great merit, marking an early return to Georgian ideals is the Little Hotel Wilmot on South Penn Square. In quite a different style still, we have the Stephen Girard Building in Twelfth street. Its portal is impressive both in proportions



"THE LITTLE HOTEL WILMOT," SOUTH
PENN SQUARE, PHILADELPHIA, PA.
WILLIAM S. MCAULEY, ARCHITECT.
An example of a well-advised return to local
Georgian prototypes.



THE CURTIS BUILDING, INDEPENDENCE SQUARE, PHILADELPHIA, PA.

Edgar V. Seeler, Architect.

It was wisely resolved to adhere to the Colonial tone of the neighborhood, and to erect a Georgian office building.

and detail while the central court within, upon which the offices open, is particularly beautiful and graceful.

As a piece of store architecture Wanamaker's shop is remarkable and, considered for its own intrinsic deserving, it is worthy of praise both as regards arrangement of mass and the application of ornament. The new part of the Union League challenges admiration on many grounds as does also the Curtis Building which, however, is in a totally different style. Situated as it is on one side of Independence Square, it was wisely resolved to adhere to the Colonial tone of the neighborhood and erect a Georgian office building. How

successful the architects have been the cuts will show.

A glance at the building of the Girard Trust Company at once suggests the thought of McKim, Mead and White and the intuitive surmise that it is the outcome of their office is correct. In this connection, however, it should be added that in many particulars of plan and ornament credit is due the president, Mr. Effingham B. Morris, who has faithfully maintained the Philadelphia tradition by his layman's knowledge of architecture. Lastly, mention must be made of Philadelphia's newest hotel, the Ritz, which is about to undergo a considerable enlargement. This addition is surely a hope-



A DETAIL OF THE CURTIS BUILDING, INDE-
PENDENCE SQUARE, PHILADELPHIA, PA.
EDGAR V. SEELER, ARCHITECT.

ful augury for the future of architecture in a city which already has such a rich architectural heritage and such a variety of buildings and styles by which to trace and measure progress.

What the coming years will bring forth in Philadelphia's architectural development it would be rash to attempt to predict but, judging by the indication of present tendencies, the outlook is distinctly reassuring. In view of steadily increasing real estate values, it is inevitable that many of the unimpressive four or five-story business buildings in the central portion of the city must give place to structures more adequate to

modern needs. Indeed, the process of regeneration is actively in progress and advancing visibly day by day. Unprepossessing products of the Centennial period are rapidly being extensively altered or else wholly demolished and replaced by more commodious and satisfactory edifices. At the same time, there is evidently an awakened architectural conscience that the projectors of new buildings may not disregard with impunity and, under the guidance of this impulse, the new operations planned or actually in course of construction display a wholesome trend that inspires the most sanguine promise.



THE GIRARD TRUST BANK BUILDING.
McKim, Mead and White, Architects.



THE STEPHEN GIRARD BUILDING, PHILADELPHIA, PA.
JOHN T. WINDRIM, ARCHITECT.



THE QUADRUPLE HOUSES AND ONE
SINGLE HOUSE, CHESTNUT HILL, PA.
DUHRING, OKIE AND ZIEGLER, ARCHITECTS.



THE QUADRUPLE HOUSES AT CHESTNUT HILL, PA.
Duhring, Okie and Ziegler, Architects.

⌘: A PRACTICAL :⌘ HOVSING DEVELOPEMENT

*The Evolution of the
„Quadruple House” Idea*

Duhring, Okie & Ziegler, Architects

Photographs by Ph. B. Wallace



FOR many years the small house problem has been considered *l' enfant terrible* at the architect's table. Architects invariably disclaimed responsibility, if there was any, and in fact, it seemed so hopeless a problem that it was left in its entirety to

a lot of mysterious outcasts who alone were supposed to arrive at practical results, and were usually personified in the one individual known as the "operative builder," an individual whose honesty was frequently questioned and whose ability was usually denied except as to his faculty for money-making. This field seemed to be a closed door to the architect, to the regular builder and to the real estate agent, all of whose func-

tions were performed by this one personage.

Of late years, this whole problem of the small house, in spite of its discreditable past, has to some extent been coming occasionally under the guidance of the architect. This state of affairs has been brought about from two causes: First, that the operative builders themselves when invading a more desirable neighborhood, have felt the necessity for something better than "ginger-bread" architecture, or worse; and second, that occasionally public spirited individuals or companies interested in the housing of their employees, or in adequately developing a tract of land, have considered it to be a problem worthy of their best attention.

The requirements of the operative builder has made his commission discouraging from the first. He is looking for something artistic and attractive,



HOUSES ON CRESHEIM ROAD, WITH QUADRUPLE HOUSES TO THE LEFT.

(See Block Plan on page 52.)

Duhring, Okie and Ziegler, Architects.

but he has very definite ideas of his own as to what this should be. He invariably says that he only wants your plans and the result is that any merit that your design may have originally possessed is completely submerged under the process of his unfeeling superintendence.

More and more the success of any endeavor on the architect's part is dependent on his being in close touch with the materials; the surface of the brick; the size of joints; manner of laying, and color and surface of rough casting; all are of as great importance as the color or texture of a fabric, and these qualifications cannot be shown on a drawing or covered by a specification, but are only secured by the most careful and strict personal superintendence. This is as it should be, because the drawings and specifications are only the means to the end, and the completed building is the finished product on which the architect must stake his artistic reputation.

The development under consideration in this article afforded, as usual, certain opportunities and certain limitations. The lots on the north side of the street are comparatively shallow so that the buildings could not vary much in distance from the street. The designs for the houses are all slightly different; brick rough cast houses alternating with stone houses, making four pair of brick and three pair of the stone houses. On the opposite side of the street more space was available and the houses were set

back so that a certain effect of space is obtained and almost the effect of an open court, as one enters, facing the street from the main thoroughfare.

In this group of houses the endeavor has been to avoid the defects that usually occur in connection with houses of moderate cost, such as unsightly back yards, buildings crowded together, lack of privacy as to the porches, and monotony as to general collective appearance. In endeavoring to do away with the back yard a plan suggested itself, that we call the "Quadruple," which consists of four houses in one block, two houses facing on one street and two on the next adjoining street, the party walls being run through in both directions on the center. The drying yards have been placed between the houses and are enclosed by trellises so that they are not in the least unsightly and the gain in appearance of the house, and in light and ventilation, by having them some 40 ft. apart is of much more advantage than the usual back yard.

There are two blocks of these houses as shown on the general plan and at both ends are single houses roughly plastered and whitewashed that are placed somewhat nearer the street. At the further end the houses have been planned to occupy the ground available and at the same time to secure for each a certain individuality.

The plan of these Quadruple Houses has been found very practical. The first



TWO OF THE QUADRUPLE HOUSES FRONTING BENEZET STREET, CHESTNUT HILL, PA.
Duhring, Okie and Ziegler, Architects.

gain over the average house of this size is to be found in the exceptionally large Living Room and Hall. The rear of this Living Room is well lighted by a skylight placed over the stairway. This skylight serves for lighting and ventilation and gives a most attractive appearance to the stairway, which in a house of this kind, is usually dark and uninteresting. The laundry has been placed in the basement directly under the kitchen, and a study of the typical plans illustrated will show not only a practical rendering of strictly essential needs, but also an attainment of a distinctly "livable" quality so usually lacking in houses which are built "by the dozen."

As a point in economy of construction, it should be noted that, as against the erection of four detached cottages, there is a saving of four exterior walls. A party wall which is solely structural is far less expensive than an exterior wall which must be finished in carefully laid face-brick, and pierced with windows. It is equally true that a considerable saving must become apparent in the one great roof over all as against four individual roofs—one Quadruple house

may certainly be estimated at appreciably less than four single houses, with the result that (assuming a fixed outlay), more money may be spent upon the quality of materials and workmanship. That such money is well-spent—an investment out at excellent interest, is evidenced in the remarkable popularity of the new Quadruple Houses. A real estate operator does not usually have to contend with a waiting list, his concern more often lies in inducing the public to occupy his houses.

Certainly an era of better building in suburban housing development can be foreseen when such marked success attends what was frankly commenced as an experiment. When groups of suburban houses may be built economically, and at the same time in decent conformity with even the most simple tenets of architecture, and when such houses meet with the practical approval of discriminating suburban tenants, we may predict the ultimate passing of the long brick "row," with its metal cornice and deadly brick-work, and may live to see a "garden suburb" about our larger cities which is something more than a Utopian vision on paper.



A DETAIL AND PERSPECTIVE VIEW OF THE QUADRUPLE HOUSES.
Duhring, Okie and Ziegler, Architects.



FIREPLACE IN ONE OF THE QUADRUPLE HOUSES, CHESTNUT HILL, PA.
Duhring, Okie and Ziegler, Architects.

ANOTHER ASPECT OF THE QUADRUPLE HOUSE

[The following note was kindly prepared by Dr. Woodward, and represents the owner's point of view, which should prove of exceptional interest not only to the architect called upon to solve suburban housing problems, but to the real estate operator as well.—Ed.]



THE Philadelphia suburban dweller suffers no loss of pride when he receives his friends in a semi-detached or in the Philadelphia colloquial phrase, "twin house." A slight social stigma may attach itself to the commuter of other cities if he is obliged to dwell in one of a pair of houses, but custom has decreed otherwise with us and long ago set its stamp of approval upon the two-family house for a suburban dwelling.

The so-called quadruple house is a logical development of the semi-detached or twin house. As land values increased and the price of building materials rose it has become increasingly difficult to provide the higher class double house at a rental between thirty and forty dollars a month. This situation suggested to the owner of a tract of land at Chestnut Hill the value of an experiment in building two twin houses, putting them back to back and thereby housing four families with all the opportunities of the roomy twin house and at the same time keeping the rent below the forty dollar limit. On this tract of land there was one broad street, and by



PERSPECTIVE OF FRONTS AND SIDES OF THE QUADRUPLE HOUSES, CHESTNUT HILL, PA.
Duhring, Okie and Ziegler, Architects.

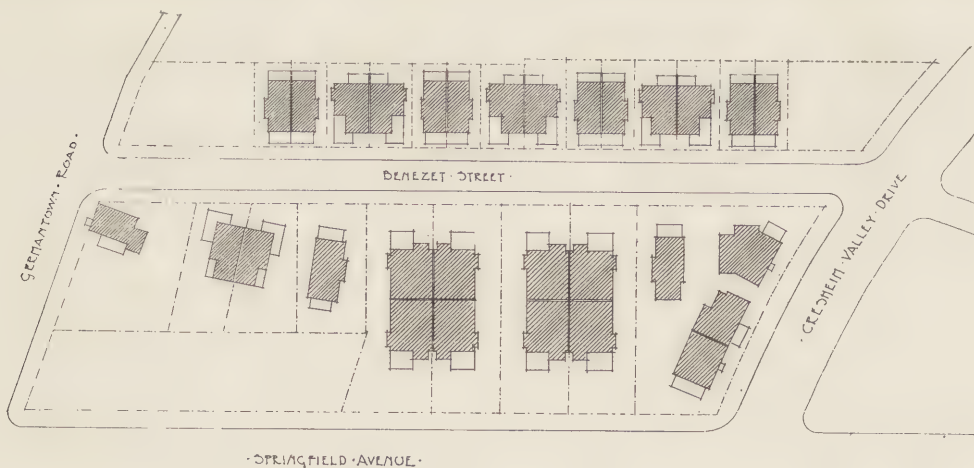
running a 40-foot street parallel to this at a distance of 150 feet the conditions required for the experiment were created.

The quadruple houses were placed midway between the two streets, leaving 30 feet of lawn in front of each pair and 38 feet between each quadruple house. One-half of this 38 feet on each side became the drying yard for each family, or in other words, a space 18

feet square was enclosed by a high lattice and equipped for drying clothes and serving all the purposes of the usual back yard. The quadruple house has solved the much discussed "back-yard problem" in a radical way because there are no back yards.

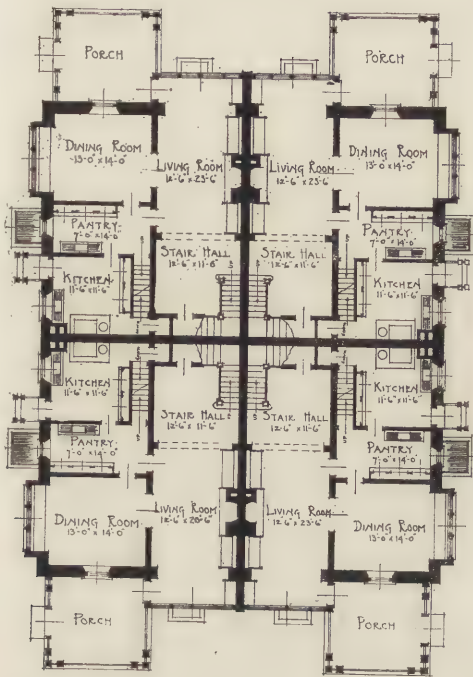
These houses are planned as follows:

The entrance is from the porch into the living room, which is about 12 feet 6 inches by 23 feet. The unusual size

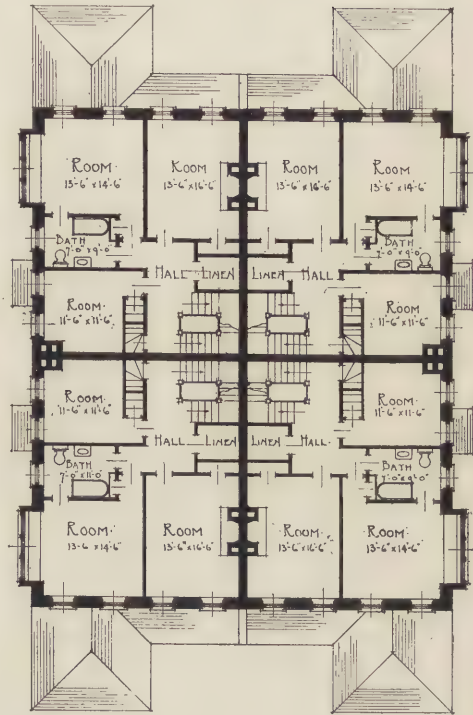


A BLOCK PLAN SHOWING THE DISPOSITION OF THE QUADRUPLE, "TWIN" AND SINGLE HOUSES, GERMANTOWN, PA.

Duhring, Okie and Ziegler, Architects.
(See note on page 54.)



First Floor Plan.



Second Floor Plan.

PLANS OF THE QUADRUPLE HOUSES—A NEW SOLUTION OF SUBURBAN HOUSING.
 Duhring, Okie and Ziegler, Architects.

of this room, together with the stair hall, forms one of the unique and very pleasing features of this type of house, the stair hall being divided off by pilasters and a ceiling beam so that the effect of two rooms is secured. The stair hall and stairway is amply lighted from above by a large skylight.

The porch has been placed at the corner and is about 16 feet square. In this location it does not interfere with the light of the living room or dining room. The dining room is 13 feet by 14 feet and is lighted by a triple window placed in a bay, containing a window seat. The pantry is unusually large for a house of this size, but it has been planned to contain the refrigerator as well as sink and dresser. The drying yard immediately adjoins the kitchen and pantry, and the laundry is placed in the basement directly under the kitchen.

The houses are heated by a hot-air system and are wired for electricity and

pipied for gas. They have a back stair, and there is a bath on the second and on the third floors. Each house has five bedrooms, arranged three on the second floor and two on the third floor.

We all know the dreary street of little houses built out to the street line in solid rows. There are miles of them in Philadelphia and while they are as Heaven itself compared with the high tenement house they are far from being attractive and make an uninteresting and commonplace street. The suburban semi-detached "row," with houses all lined up on the street or all spaced rather reluctantly back from the building line is a concession to the craving of the suburban family for individuality and beauty. Our suburban streets, however, when fully developed in this way are comparatively dreary and commonplace. The two Chestnut Hill streets shown in this article are a happy departure from this curse of monotony. This improved

aspect results not only from placing the houses at varying distances from the street and changing the type from semi-detached to detached but largely from the introduction of the quadruple type. To the chance observer on either of the two streets the quadruple house appears as one large dignified dwelling house with thirty feet of lawn in the front and it is only on closer inspection he discovers that one roof covers four families.

In reporting this type of house to the National Housing Conference the writer was asked about the death rate because in England the questioner stated "back to back" houses had a bad name for high mortality. The answer was a clean bill of health; no one had died and at least two children had been happily born. That was three years ago and the same high

rate of happiness prevails in the "Quads." A convincing bit of evidence as to the comfort of this house is contained in the statement that some of these quad houses are always sublet for the summer months. Another strong bit of testimony in their favor is the existence of a waiting list of applicants. The first two quadruples were so popular that three more have been recently built housing twelve families, all of which were rented before the roofs were on. An interesting point lies in this experience that a number of people living in forty dollar twin houses have applied for forty dollar quadruple houses. If the proof of the pudding is in the eating the quadruple pudding has tickled the palate of the Philadelphia suburban tenant.

[In a forthcoming issue of THE ARCHITECTURAL RECORD will appear a second article on the "twin" and "single" houses by Duhring, Okie and Ziegler. The location and disposition of these houses may be seen in the Block Plan illustrated here on page 52.—Ed.]



SIDE ELEVATION OF TWO OF THE QUADRUPLE HOUSES.
Duhring, Okie and Ziegler, Architects.



ENTRANCE FRONTS OF TWO QUADRUPLE HOUSES, CHESTNUT HILL, PA.
Duhring, Okie and Ziegler, Architects.
A second "quad" may be seen at the left.



LIVING ROOM IN ONE OF THE QUADRUPLE HOUSES, CHESTNUT HILL, PA.
Duhring, Okie and Ziegler, Architects.



DETAIL OF A DOOR FROM WYCK,
PHILADELPHIA, PA., BUILT IN 1690.
An example of "Pre-Georgian" architecture.



From "Colonial Homes of Philadelphia," by H. D. E.; J. B. Lippincott Co.
 WYCK, PHILADELPHIA, PA., BUILT IN 1690.
 An example of "Pre-Georgian" architecture.

THREE TYPES OF GEORGIAN ARCHITECTURE

The Evolution of the style in Philadelphia

By Harold Donaldson Eberlein

Photographs by Ph. B. Wallace and Others



LOOSE definition begets hazy thinking, and hazy thinking brings feeble conception and slipshod execution. If exactitude of thought and definition be essential in the practice of the sundry arts, the same exactitude is demanded in the practice of architecture, which is the "Queen of Arts," co-ordinating and drawing upon them all to fulfill her noble purposes and designs. In the nomenclature of architectural styles there has arisen, perhaps through carelessness, a most unfortunate confusion between

the terms "Colonial" and "Georgian," and in this confusion, naturally enough, little attention has been paid the fact that there are several variations of type in Georgian work that ought to be taken into account.

The examples of Georgian domestic architecture to be found in and about Philadelphia offer an unsurpassed field for examination and comparison, and a study of their peculiarities shows an interesting evolution through three distinct forms, all of which, nevertheless, belong to the same generic classification. Before going on, however, to a detailed investigation of those three types, it will be well to settle just what we are to understand by "Colonial" and what by

"Georgian" in the correct application of these names.

If we carefully differentiate these two styles we shall then better understand why houses of "Colonial" pattern continued to be built during the "Georgian" period, are still built to-day and why they are mischievously confounded with a family to which they do not belong, although certain features from that family may have been borrowed and incorporated from time to time. There is no need of producing further confusion by suggesting that much that is labelled "Colonial" ought rather to be docketed "Provincial" if we wish to be rigidly accurate regarding historical phases. Quite setting aside this objection as hypercritical, it is clear that the name "Colonial," as its etymology implies, ought to be applied, in the strictest sense, only to a style originating and practiced during the so-called Colonial period of our history. It is manifestly improper, therefore, and misleading to append the label "Colonial" to a phase of architectural expression that originated in England and was little used in America until after our political ties with the mother country had been sundered. And yet such was the case with the third phase of the Georgian style which reached its fullest bloom on this side of the Atlantic about the beginning of the nineteenth century. But there are more cogent reasons for insisting on a clear-cut distinction between the terms "Colonial" and "Georgian" than the foregoing which, to some, may seem a trifle finical and quibbling.

There *is* such a thing as "Colonial" architecture, and we must define exactly what it is at the outset so as to keep our Georgian classification perfectly plain. "Colonial" architecture evolved its distinctive forms in America and was influenced in the course of its development partly by the dictates of local necessity, partly by inherited tradition deeply implanted in the minds of the colonists, most of whom came hither with well stocked heads at least, if not with ample store of wordly gear. It is not surprising, therefore, considering this double modification of local conditions and

hereditary notions among colonists hailing from widely different places, to encounter a marked diversity between the dwellings they builded for themselves, all of which have an equal title to the name and are very properly classed as Colonial.

The first English people in America produced little of permanent character in the way of a local Virginian architecture. Virginia building, from earliest times, closely followed English precedent, so we may, therefore, pass on at once to the colonists next in point of time to arrive, namely, the Dutch of New York. They produced a strongly individual type of Colonial architecture, possessed of singular charm and vitality, a type that has a large following of warm adherents and admirers to-day. It might be added that all the Dutch houses by no means belonged to one type. Some were merely replicas of houses in Holland and showed no traces of local influence and therefore had no claim to be styled Colonial. Even in the Dutch Colonial type there are minor differences that can be traced between the developments in different localities, as, for instance, between the houses of Dutch Long Island and those at Albany.

Quite another phase of Colonial architecture developed in New England where the Puritans, partly out of true British conservatism and attachment to long established custom, partly out of native Yankee mother wit and shrewd practicality quickened by the spur of necessity, devised a mode of architectural expression that has some admirable features to commend it. Many of the early New England houses show the strong influence of English building traditions in the half-timber construction which is often hid under a prosaic jacket of clapboards. Whenever this clapboarding is torn off for repairs or alterations, very strange things come to light. The writer has seen such old houses, when partly divested of their clapboard casing, reveal typical half-timber constructional methods, the spaces between the great oaken uprights pugged with brick and clay, besides exhibiting other characteristics of unmistakable origin.

The overhang of the second floor, pro-



A DETAIL, WYCK, PHILADELPHIA, PA., BUILT IN 1690.
An example of "Pre-Georgian" architecture.

jecting some distance beyond the walls of the first, is another striking instance of the survival of half-timber building traditions. A close examination of the structure of an unjacketed clapboard house would show this beyond peradven-

ture. It has been fondly supposed by some that the overhang was meant for purposes of defence. It may have been turned to that use when occasion required, but defence was certainly not the original idea, for, in that case, the pro-

jection would doubtless have been carried all the way around the building, as it was in the block houses, where, of course, this feature was meant primarily to facilitate defence and enable the occupants literally to heap coals of fire, boiling oil and such like tokens of regard upon the devoted heads of their red-skinned assailants.

Another evidence of attachment to ancient custom is seen in the predilection of the old New Englanders for wood as their favorite building material. With the abundance of stone at hand all through New England, the choice of wood was plainly a matter of preference. By way of contrast, let us glance for a moment at another part of the country. In the neighborhood of Philadelphia, the early buildings, almost without exception, were of stone or brick. Yet there was no dearth of timber. Time and again, in fact, it would have been far easier to hew the timber, which was well nigh oppressive in its abundance, than to come by stone or brick that often had to be carted for miles over villainously bad roads. The explanation of this seeming anomaly of wooden buildings in stony New England and brick and stone buildings in thick-timbered Pennsylvania is probably to be found by a reference to history. A very considerable portion, if not a majority, of the early New England settlers came from the Danish portions of Old England, where it had been the custom from time immemorial to build of wood. The majority of the early Pennsylvania colonists, on the contrary, came from the Saxon portions of England—a diagonal line drawn from Cheshire to Kent would run through much of the territory—where it had been the custom, also from time immemorial, to build of brick or stone. In both instances place names and surnames help to bear out this theory. The choice of building materials, therefore, in each case, would seem to have been largely a matter of inherited preference.

The New England half-timbered house, encased in clapboards, and modified from time to time in shape and structure as local expediency suggested, formed the foundation of one distinct

Colonial type that has been worthily perpetuated ever since. Other New England types there were also, of a different origin, but alluring as the subject is, we must pass on. The Swedish settlers in Delaware, Pennsylvania and New Jersey, too, imparted a local flavor to their buildings. Their influence can usually be detected in the steep pitch of a large number of the roofs in the sections where they were most numerous. They left their mark in other little subtle particulars as well. Lastly, in Pennsylvania and parts of west Jersey we find yet another Colonial type closely associated with the Quakers, while the settlers in the Welsh Barony managed to put a decidedly national feeling into the structures they reared.

Now all the instances just cited go to show that there was an early American architecture, quite distinct in type from Old World antecedents or from any more recently introduced style that followed, and fully entitled, furthermore, to the name "Colonial" because it was developed in Colonial times. In addition, the aspects of this Colonial architecture varied widely according to locality and racial bias.

In strong contrast to all these local, substantial and thoroughly democratic manifestations of Colonial building activity was the stately and formal Georgian style that found favor in the eyes of the well-to-do about the end of the first quarter of the eighteenth century and from thence onward enjoyed the widest popularity, undiminished until the Classic revival swept all before it. The accession of wealth at that time, incident to the general prosperity and freedom from the alarums of war and Indian irruption, brought with it a desire for more pretentious housing and greater display in the manner of living. Accordingly the Georgian style was introduced as better suited to the more elegant tastes of the day.

"Georgian," of course, in the narrowest sense would indicate the mode in vogue during the reigns of the Georges, but Georgian architecture is not to be limited by any such cramped or arbitrary bounds. It was the style evolved by logi-



WYNNESTAY, PHILADELPHIA, PA., BUILT IN 1689.
An example of "Pre-Georgian" architecture.

cal steps from the prevailing type of preceding reigns and was, in short, an expression of Renaissance Classicism, filtered through a medium of English interpretation and adapting to local needs, on lines first marked out by the seventeenth century architects headed by Inigo Jones and Sir Christopher Wren. The stateliness and formality of Georgian design satisfied the cravings of prosperous Colonial gentry for the affluent pomp and circumstance with which they chose to surround themselves. Having said this much in a general way to emphasize the typical and historical differences between "Colonial" and "Georgian" architecture, let us go on to examine the varied aspects of Philadelphia Georgian houses, first, however, taking a survey of two Philadelphia pre-Georgian or Colonial houses that we may the better understand and appreciate the essential points of difference involved.

The first of these houses to claim our attention is "Wynnestay," the ancient home of the Wynne family, on the borders of the Welsh Barony. When built in 1689 it was in deep country; now it is within the city limits. In its general character it is similar to the other old Welsh houses nearby, such as Pencoyd at Bala, built in 1683, or Harriton at Bryn Mawr, built a little later, but it has suffered less change in the lapse of years than its near neighbors in Lower Merion township, or other sections where the Welsh Quakers settled, and it is, therefore, better fitted to represent the type.

Wynnestay is built of native grav field stone of varied sizes—some of the stones were probably turned up in the course of clearing the fields round about—pointed with white mortar. Oblong in shape, with a plain ridge roof, the structure is utterly devoid of all pretense to

ornament save the bold moulding of the cornice. A continuation of the cornice from the eaves, following the same horizontal line, traverses the face of the wall at each gable end, making, with the gable cornices, a complete triangle. This arrangement of the cornice, as a string course across the gable ends, gives the roof a downright, firmly settled aspect, besides bringing down the height of the house and making it appear more squat than it really is. Wynnestay was built at two different times. The first part, built in 1689, has a penthouse along the front with a triangular hood over the door. The latter portion, built in 1700, lacks the penthouse between the first and second floors but has the triangular hood above the door.

Practically the only alteration Wynnestay has ever undergone was raising the ridgepole of the roof of the oldest part to the line of the 1700 addition when it was found necessary to make some repairs. Save this and an addition built at the back, to meet increased domestic needs, Wynnestay remains to-day in its

pristine state and is, therefore, valuable as a well preserved example of Welsh Colonial work. Doors and windows are low but of generous breadth and are capped by heavy stone lintels made of thick, single oblong slabs that must have cost no ordinary exertion and energy to transport and set in place. The two dormers that pierce the roof have the same sharply right-angled peaks that we shall see in another Colonial example. As we might expect, the walls are thick, and everything about it is of the most solid construction.

Wynnestay and other old houses just like it were the forerunners and patterns of a type of structure that has come to be known as the Pennsylvania Colonial farmhouse. Very worthy the style is, thoroughly comfortable, homelike and sensible and deserving the popularity accorded it, so long as it sticks closely to its severe simplicity and avoidance of all pretense. The very moment, however, we depart from time-honored tradition and attempt to begawd this sort of building with



HOPE LODGE, WHITEMARSH VALLEY, PA., BUILT IN 1773.
An example of the "First Type" of Georgian.



THE HALL, CLIVEDEN, GERMANTOWN, PHILADELPHIA, PA., BUILT IN 1761.
An example of the "Second Type" of Georgian.

Georgian embellishments and furbelows—a thing far too often done, it is sad to say—it looks about as unseemly and ludicrous as would an elderly Quakeress, garbed from the middle up in the regulation scoop bonnet and sad-colored plain waist buttoned in front but, from her middle down, arrayed in a tight, hobbled and slashed skirt. Before leaving the subject, one should add that the Pennsylvania Colonial farmhouse is found in roughcast and brick, as well as stone, and that the buildings erected by the English settlers were apt to be somewhat higher than the low, squat dwellings of the Welsh whose natural predilection for thickset "stumpiness" is well exemplified in the towers of their churches.

Our next Colonial example is Wyck, in Germantown, at the corner of Walnut Lane and Germantown Road. Like Wynnestay, Wyck has undergone scarcely any change since its staunch walls were first reared. Furthermore, Wyck has never been sold, but has passed from owner to owner by inheritance and, as

its possessors have always been careful to maintain everything in its original condition, it can readily be seen that a more trustworthy example of Pennsylvania Colonial architecture could not be chosen. Wyck is really two houses joined together. The first was built about 1690 or earlier; the second, though built somewhat later, nevertheless dates also from an early period. Through the first floor of the connecting portion, that links the two houses into one, ran a paved passage or wagonway. This passage was afterwards closed in and now forms a great hallway from which open outward big double doors, almost as wide as barn doors, with a long transom of little square lights above them.

The whole long south front of the house is plastered and whitewashed. Trellises cover the face of the wall, and the vines with their masses of dark foliage stand out in sharp contrast to the gleaming brightness of their background. At Wyck the windows are higher and not so wide in proportion as at Wynnestay,

and the same may be said of the doors. The proportions are excellent, and the measurements of sash-bars, muntins and panes have been duplicated by architects again and again with most satisfactory results. The dormer heads have the same sharp angularity as those at Wynnestay. At Wyck, however, the cornice runs only beneath the eaves and does not extend across the wall of the gable end. This horizontal extension of the cornice as a string course was more apt to occur in houses of Welsh or English build, whereas the Germans, one of whom built Wyck, usually left their gable ends unadorned. In fact, there is no cornice at all at the gable ends of Wyck, and the junction of wall and roof is marked only by the plainest of plain barge-boards, beyond which the roof edge scarcely projects. At Wyck the pitch of the roof is not so steep as at Wynnestay, and it may be remarked that the flatter pitch was generally found on Colonial houses built by the Germans and also on the later English Colonial houses.

Both Wynnestay and Wyck, different as they may be in national tone, are alike in their thorough-going staunchness, their straightforward simplicity of plan and detail and their utter lack of all conscious effort at adornment. It is true, both houses have distinct elements of charm and embellishment arising from such details as the trellises and long transoms with little lights at Wyck or the hoods above the doors and the extension of the cornice across the gable end walls at Wynnestay, but the effect is wholly fortuitous and not the result of design. Both houses are thoroughly typical of most of the contemporary dwellings and, because of their escape from damaging alterations, the purity of their form has not been impaired. Both, too, well exemplify architectural modes that have continued uninterrupted in use to our own day. So much, then, for worthy specimens of Pennsylvania styles that are truly Colonial.

And now we advance to the study of our three Georgian types wherein we



CLIVEDEN, GERMANTOWN, PHILADELPHIA, PA., BUILT IN 1761.
An example of the "Second Type" of Georgian.



From "Colonial Homes of Philadelphia," by H. D. E.; J. B. Lippincott Co.

THE HIGHLANDS, WHITEMARSH VALLEY, PA., BUILT IN 1796.

An example of the "Third Type" of Georgian.

shall see a process of evolution, slow in its working, perhaps, but unmistakable as final comparison will show. Indeed, a casual glance at the group of illustrations placed at the beginning of this article will show easily distinguished differences of contour and detail in the examples chosen to represent the evolutionary stages. Fortunately, history comes to aid us, removing all element of conjecture and giving us, instead, a comfortable certainty of the ground we are treading on. It is, of course, impossible to set any exact and unalterable dates for our three Georgian types; our purpose will be best subserved by giving approximate dates between which certain characteristics may be looked for and certain changes expected to take place. We may, roughly speaking, say that the first type flourished between 1720 and 1740, the second type from 1740 to 1770, and the third type from 1770 to 1805. Several parts of these three type divisions were marked by times of great building activity and

others again by times of comparative idleness. From 1720 to 1730 there was a great deal going on. Then again, about 1760 we find a regular epidemic of house construction breaking out. Just before, during and after the Revolutionary War, as one would naturally assume, public stress, peril and uncertainty discouraged the prosecution of new plans, although the builders, even then, were not wholly idle. What has just been said applies particularly to country seats, as we have fuller data concerning them than we have about most of the town houses. What were once country seats have been selected for illustration, too, because they are, for the most part, intact, while comparatively few of the town houses remain in their original interior state, being, as they chiefly are, in a part of the city now given over to business or to the housing of the foreign population.

Philadelphia affords especially favorable opportunity for a careful examination and study of the several types of

Georgian expression. Indeed, for purposes of comparison, the advantages it offers are unsurpassed, owing to the available wealth of varied material of the best sorts, and that, too, in a state of excellent preservation. At times one is really troubled with an embarrassment of riches in this respect and selection becomes difficult. From the early years of the eighteenth century Philadelphia advanced rapidly in commercial prosperity. Ship-building, textile industries and various sorts of manufactures soon brought a bulk of trade second to none among the seaports of the Colonies. Traffic with the East and West Indies, as well as with Europe, poured gold into the coffers of her merchants and brought affluence and culture at an early stage of her career. The chief wealth of her most considerable citizens was almost invariably derived from profitable shipping ventures. By 1750 Penn's "greene country towne" had become the greatest and most important city in the country, the metropolis of the American Colonies. "No other could boast of so many streets, so many houses, so many people, so much renown. No other city was so rich, so extravagant, so fashionable." Among the features that impressed visitors from distant lands was the fineness of the houses. Sometimes parts of the wood-

work and building materials were fetched over-seas, although the skill of the resident artisans was of no mean order, as their handiwork proves to-day. Men of such social distinction and substance as were many of Philadelphia's principal citizens would not be meanly housed, and it is not surprising, therefore, that much of the best domestic Georgian architecture in America is to be found in the city or in its immediate neighborhood where the dwellings, whether town houses or country seats, reflected the estate and consequence of their owners. As one instance—and there were many—of a delightful and favorite suburb, now included in Fairmount Park, but then well beyond the city boundaries, we may cite that portion of the Schuylkill, of charm and loveliness unexcelled, where the river winds among rolling highlands on whose summits spacious homes of comely dignity sheltered some of the most distinguished citizens of the metropolis whose society was gayer, more polished and wealthier than anywhere else this side of the Atlantic. Here, too, the country seats bespoke the urbanity and degree of their occupants, and here, to-day, they still bear mute witness to an elegance long past.

Notwithstanding all this architectural wealth and its perfect accessibility, Phila-



THE WOODLANDS, PHILADELPHIA, PA., NORTH FRONT, BUILT CIRC 1770.
An example of the "Third Type" of Georgian.



THE WOODLANDS, PHILADELPHIA, PA., SOUTH FRONT, BUILT CIRCA 1770.
An example of the "Third Type" of Georgian.

delphia has received but scant justice at the hands of many architectural writers. In an highly esteemed and well known work, properly regarded as a valuable source of information anent architecture in Colonial and post-Colonial America, the writer of one portion has greatly erred in his estimate and analysis of Philadelphia's Georgian remains, probably through insufficient acquaintance with that part of his subject. After referring to Philadelphia as architecturally "the embodiment of Philistinism," he goes on to speak of the buildings of Colonial days and says of them "the details generally are hard and crude and often inappropriate." As a representative example of the eighteenth century country place he instances the Bartram house and writes "the home of the Colonial botanist, John Bartram, at Philadelphia, built in 1731, has two-story, semi-detached columns with huge Ionic scrolls. The German rococo mouldings in the window frames, too, are out of all scale with the humble dwelling."

Bartram's house ought not to be regarded as in any way representative of Philadelphia domestic architecture, and, least of all, as representative of Georgian building. It is in a class all by itself and represents nothing but John Bartram's home-made efforts in both plan—if it can be said to have any plan—and execution of detail. Whatever its inconsistencies and defects, there is undeniably the charm of beauty and interest about the place, but it has no architectural affinities. The same writer goes on glibly to assure his readers that "in Pennsylvania there were rarely any verandas, porches or gardens,"—a mischievous and misleading statement.

The verandas and porches may take care of themselves for the nonce, but the gardens need a passing word of vindication. In no place were there more notable gardens than in Philadelphia. Leaving Bartram's garden out of the horticultural tale—the writer alluded to might cavil at it as a kind of nursery—there was "The Woodlands" nearby, whose



From "*Colonial Homes of Philadelphia*," by H. D. E.; J. B. Lippincott Co.
 GRAEME PARK, HORSHAM, PA., BUILT 1721-1722.
 An example of the "First Type" of Georgian.

gardens, from the middle of the eighteenth century onward, were as extensive and famous as any in the land, and exquisitely planned and maintained. There was the Grange, well known from early Colonial days, whose garden, even in its decay, is wonderful and beautiful. There was Ury House, whose box garden has been the pride of its owners and the delight of their guests for more than 150 years. There were the gardens at Grumblethorpe, Netherfield, Cedar Grove, the Highlands, Belmont, Fair Hill, to name only a few, while in the heart of the city the Bingham, Powel, Blackwell, Willing, Morris and Cadwalader houses, along with many others, all had spacious gardens, well planted and tastefully arranged. A writer who could ignore all this material, could scarcely be expected to do justice to the houses. The examples now to be adduced will set the matter in a fairer light.

It ought to be stated that most of the eighteenth century houses in Philadelphia and its neighborhood were not designed by architects, but were planned by their owners and executed by skilful carpenters and builders. Some architectural knowledge was held to be a part of a gentleman's education, and such men as Andrew Hamilton and John Kearsley, though amateurs, displayed no contemptible ability. The master carpenters of the city, in 1724, composed a guild large and prosperous enough to be patterned after "The Worshipful Company of Carpenters of London," and, in 1736, became possessed of a choice collection of architectural works devised to his fellow members by James Portius, whom William Penn had induced to come to his new city to "design and execute his Proprietary buildings." In the Ridgway Branch of the Philadelphia Library there is also a collection of seventeenth and



DETAIL OF WEST GABLE ELEVATION, GRAEME
PARK, HORSHAM, PA., BUILT 1721-1722.
An example of the "First Type" of Georgian.



[Measured detail drawings of these interiors will appear in a forthcoming issue of THE ARCHITECTURAL RECORD.]

DETAIL OF GREAT PARLOR, GRAEME
PARK, HORSHAM, PA., BUILT
1721-1722.



*From "Colonial Homes of Philadelphia,"
by H. D. E., J. B. Lippincott Co.*

INTERIOR ELEVATION OF GREAT CHAMBER ON SECOND
FLOOR, GRAEME PARK, HORSHAM, PA., BUILT 1721-1722.

eighteenth century books, treating of architecture, carpentry, joinery and various subjects connected with building, an examination of which will show that the artisans of the Georgian period were well supplied with guides devised to make the mysteries of their craft plain to the "meanest understanding."

The two houses chosen to exemplify the first Georgian type are Graeme Park, Horsham, begun in 1721 and finished the following year by Sir William Keith, sometime Lieutenant-Governor of the Province, and Hope Lodge, in the Whitemarsh Valley, built in 1723. Graeme Park was then in the heart of the wilderness and a special road had to be cut, still called the Governor's Road, to enable His Excellency to reach the Old York Road whenever he chose to trundle to the city in his great begilt and blazoned coach, drawn by four stout horses and attended with all the panoply of outriders and footmen on post-board, as befitted a person of his rank.

The house suited the manorial style of

life maintained by the baronet. To the rear of the main building were detached wings containing quarters for the servants, the kitchens and the various domestic offices, thus leaving the whole of the hall for the use of its occupants. The small buildings disappeared years ago, and the whole place, long unoccupied, is gradually falling into decay, a plight from which, however, it could be easily rescued. The house is over sixty feet long, twenty-five feet in depth and three stories in height. The walls are of rich brown field-stone, carefully laid and fitted, and are more than two feet thick, while over the doors and windows, whose dimensions are thoroughly characteristic of the date of erection, selected stones are laid in flattened arches.

At the north end of the building is a great hall or parlor, twenty-one feet square, with walls wainscotted and panelled from floor to ceiling, a height of fourteen feet. The fireplace in the parlor is faced with dark marble, brought from abroad, while in the other rooms



From "Colonial Homes of Philadelphia," by H. D. E.; J. B. Lippincott Co.

HALLWAY OF HOPE LODGE, WHITEMARSH VALLEY, BUILT 1723.

An example of the "First Type" of Georgian.



From "*Colonial Homes of Philadelphia*," by H. D. E.; J. B. Lippincott Co.

PARLOR OF WHITBY HALL, KINGESSING, PHILADELPHIA, PA., BUILT IN 1754.

An example of the "Second Type" of Georgian.

Dutch tiles were used for the same purpose. On each floor are three rooms. Stairs and banisters are of heavy white oak, and all the other woodwork, of yellow pine, is of unusual beauty, executed in simple and vigorous design. The woodwork is worthy of special attention, for therein we may see embodied some of the chief characteristics of the first Georgian type.* The detail of ornamentation is heavy and bold, though by no means ungraceful. Mouldings and cornices are more pronounced in profile than we find them at a later date and stand out with peculiarly insistent relief, while certain forms quite vanish in subsequent types. One feature worth noting is the mantel shelf in the parlor. Such shelves were rarely found till a later date.

Hope Lodge, hard by St. Thomas's Hill, in the Whitemarsh Valley, was

*Measured details of this work, reproduced to scale on large sheets, will appear in Part II of this article, in a forthcoming issue of THE ARCHITECTURAL RECORD.

built in 1723, as previously stated. It is a great square brick structure of two stories in height with a hipped roof. As at Stenton (built in 1728), the bricks are laid in Flemish bond and occasional black headers appear. The doors and windows, like those at Graeme Park, Stenton and other contemporary houses belonging to the first Georgian type, are higher and narrower in proportion than those of a later date. Over the front windows are wedge-shaped lintels, flush with the wall surface, formed of bricks set vertically in the centre and gradually spreading fanwise toward the sides in diagonals convergent to the base. Some of the windows at the sides and back show the flattened arches, noticeable at Graeme Park and Stenton, over slightly countersunk tympana above the frame tops. Over some of the doors are transoms of six or seven square lights in a single row, while over the tall and very narrow side door, just as at Stenton



From "*Colonial Homes of Philadelphia*," by H. D. E.; J. B. Lippincott Co.

SOUTH FRONT, WHITBY HALL, KINGSESSING, PHILADELPHIA, PA., BUILT IN 1754.

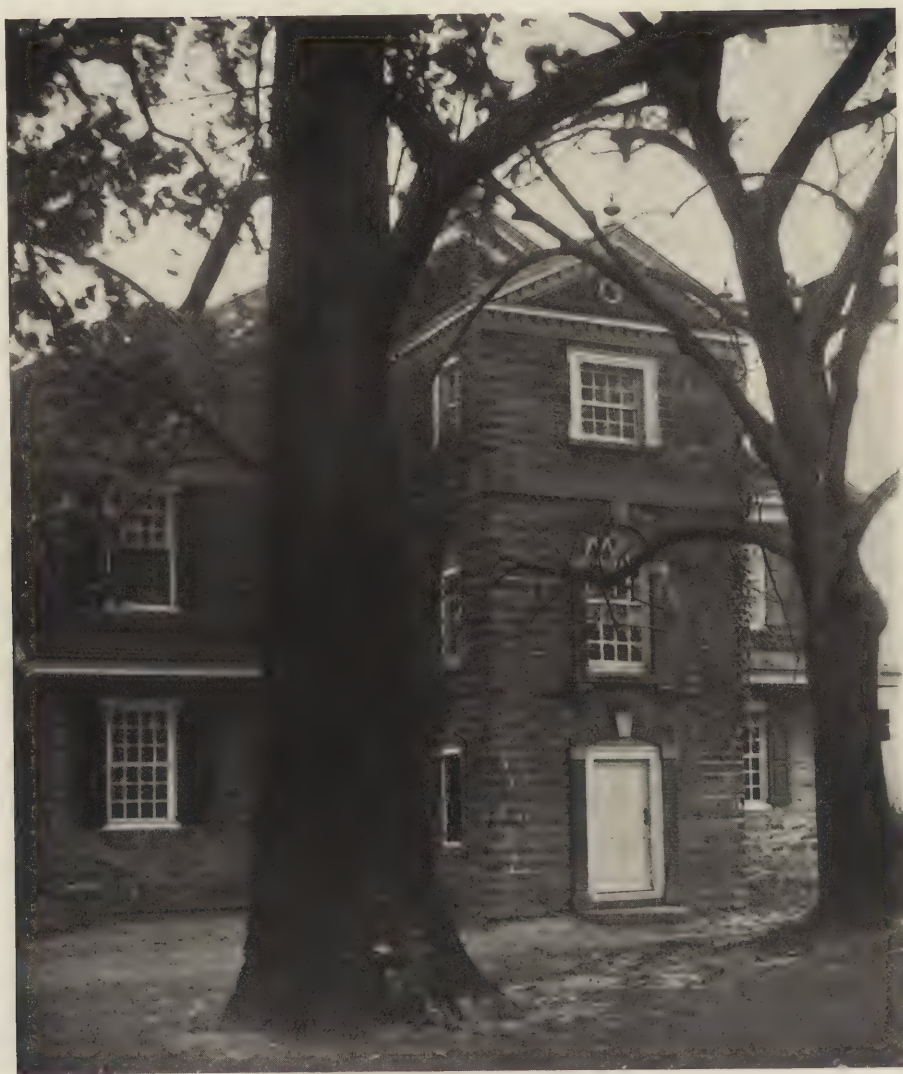
An example of the "Second Type" of Georgian.

and as over the two narrow rear doors at Graeme Park, there is a transom of eight square lights in two rows of four each. The cornice at the eaves has a deep sweeping cove of plaster on a lath backing, while the heavy moulding courses are of wood. Viewed from the front the roof is hipped, but from the side it presents a curious combination of hip and gambrel.

Within, a hall of unusual width, far larger than most rooms nowadays, traverses the full depth of the house and opens into spacious chambers on each side. The chief rooms have round-arched doorways and narrow double doors, heavily panelled. All the panelling, in fact, is heavy. The single doors on the first floor are surmounted by handsome pediments. There are deep-panelled window-seats in the ground-floor rooms and the windows have exceptionally broad and heavy muntins. The breadth of the fireplaces, faced with dark Scotch marble, and the massiveness of the wain-

scotting correspond with the other features. Throughout the house all the woodwork, which is said to have been fetched from England, though handsomely wrought, is heavy and most substantial. Midway back in the hall a flattened arch springs from fluted pilasters with capitals of a peculiar design. The stairway, which is remarkably good and strongly suggests an old English arrangement, ascends laterally from the rear hall. Back of the house a wide brick-paved porch connects with another building where were the servants' quarters and kitchens—an arrangement characteristic of the period.

Of the houses representative of the second Georgian type, Whitby Hall, Kingessing, West Philadelphia, comes first on the list. The western end of Whitby Hall, the part with which we are here concerned, was added in 1754 by Colonel James Coultas, "merchant, ship-owner, farmer, mill owner, fox-hunter, vestryman, soldier, judge, High Sheriff



From "Colonial Homes of Philadelphia," by H. D. E.; J. B. Lippincott Co.
 "THE TOWER," NORTH FRONT, WHITBY HALL, KINGSSESSING, PHILADELPHIA, PA.,
 BUILT IN 1754.

An example of the "Second Type" of Georgian.

of Philadelphia from 1755 to 1758, and enthusiastic promoter of all philanthropic and public enterprises." The gables of the high-pitched roof face north and south and are pierced with oval windows to light the cockloft. The walls, not on one side only, as is often the case where especial nicety of finish was sought, but all the way round, are built of carefully squared and dressed native grey stone. On the south front is a flag-paved piazza,

surmounted by a graceful spindled balustrade, while around the western and northern sides runs a penthouse. The deeply coved cornice beneath the eaves, just as at Wynnestay, is carried in a continuous horizontal line as a string course across the gable end, or rather the gable side walls.

A remarkable feature about Whitby is the arrangement of the roof. It is the exact reverse of what is ordinarily found.

The ridgepole, instead of running parallel to the length of the structure, traverses its breadth, thus making the peak higher, the slope longer, and allowing space for a roomy third floor, all of which the view of the south front clearly shows. This arrangement also avoids the need of dormers. "On the north front is a tower-like projection in which the stairway ascends with broad landings. The low doorway in this tower has always been used on occasions of large gatherings at Whitby, whether grave or gay, because it admits to the wide hall running through the Western wing, giving admittance to the large rooms on either side. The doorway and windows in the tower are all surrounded with brick trims, which give both variety and distinction against the grey stone walls—a treatment not often met with near Philadelphia. In the top of the pediment with its dentilled cornice, a bull's-eye light, also surrounded with brick trim, is of particular interest because it was a porthole glass from one of Colonel Coultas's favorite ships, and was set there because of a cherished sentiment. On peak and corners of the tower pediment three urns add a note of state.

All the woodwork and sundry embellishments of the 1754 addition were fetched from England in Colonel Coultas's ships. The pilasters and cornices in

the hall are exceptionally fine. Rosettes are carved in the dogears of the door trims and the cheeks and soffits of the jambs are set with bevel-flush panels. In the parlor, the fireplace opening is faced with black marble brought from Scotland, while the carving of the overmantel and the panelling are unsurpassed for either execution or design. The central panel above the fireplace is three feet high and nearly six feet wide, and not a joint can be discovered in it. Below it is a band of exquisitely wrought floriated carving in high relief. Although it is possible to find more elaborate woodwork, it is rarely that one meets with a degree of elaboration tempered with such dignified restraint and consummate good taste.

In 1842 the then owners of Whitby Hall, conceiving that the oldest part of the house had fallen into irreparable decay, demolished it and built the present eastern wing with scrupulous care that it should match in style and texture the structure of 1754. One could wish that they had repaired instead of building anew, but their work was done so well that the effect of the whole is harmonious and their effort is witness to a degree of architectural intelligence scarcely to be looked for at a time when such matters were not sufficiently regarded."

[The second part of Mr. Eberlein's analysis of the "Three Types of Georgian," with measured details, reproduced to scale on large sheets, will appear in a forthcoming issue of THE ARCHITECTURAL RECORD.—Ed.]



From "Colonial Homes of Philadelphia," by H. D. E.; J. B. Lippincott Co.

THE STAIRWAY, WHITBY HALL, KINGSSESS-
ING, PHILADELPHIA, PA., BUILT IN 1754.
An example of the "Second Type" of Georgian.



IRON GRILLE AT THE STREET END OF THE COURT-
YARD ENTRANCE, OFFICE OF MR. WILSON EYRE.



"1003 SPRUCE STREET"—THE EXTERIOR OF MR. WILSON EYRE'S HOUSE.
Typical of early Philadelphia.

THE OFFICE & APARTMENTS ' of a PHILADELPHIA ARCHITECT

Mr. Wilfon Eyre at 1003 Spruce Street

By Roger Caye

Photographs by Ph. B. Wallace

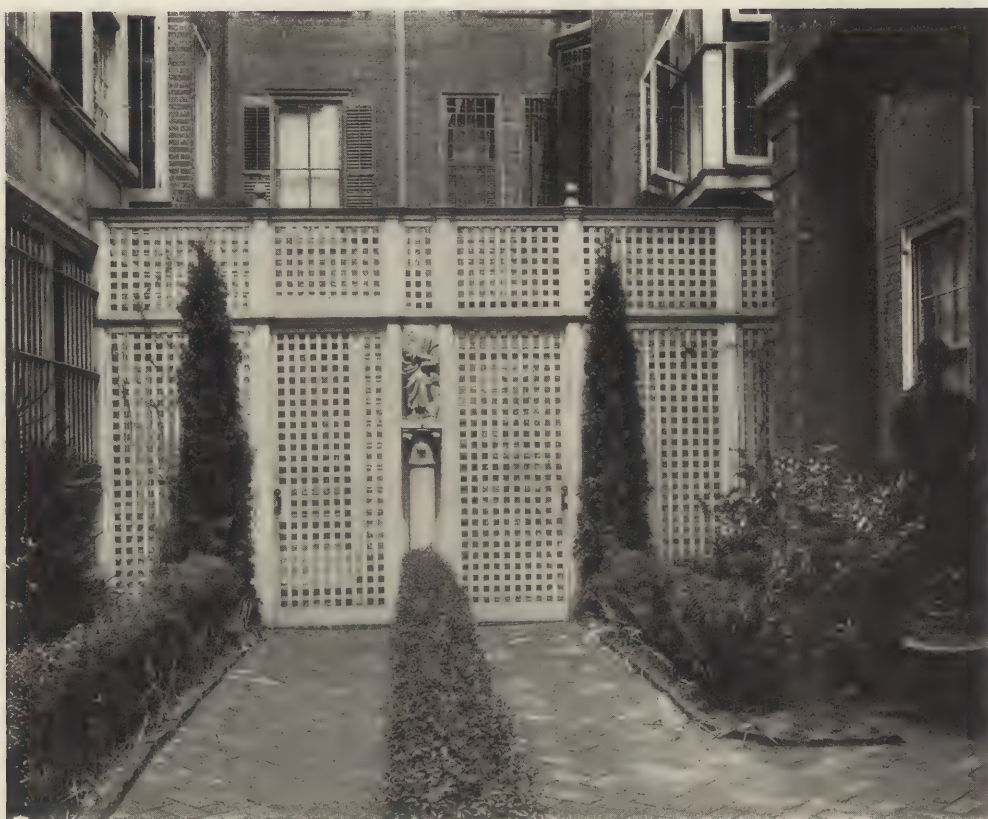


WE remember that "satiabile curiosity" wrought a grievous mishap to Kipling's "Elephant's Child." Curiosity, nevertheless, is an excellent thing to have if we keep it within bounds and don't make it a bore to our neighbors.

It is an instinct deeply implanted in our makeup and, rightly directed, it prompts legitimate enquiry and contributes mightily to our understanding of the world about us. One of its most wholesome and laudable manifestations is the desire to know how and when and where things really worth while were accomplished. It is for just

such a phase of proper curiosity, and in order to gratify it, that what follows is intended.

For the most part, architects as individuals are exceptionally engaging people. This tribute a layman, who knows many of them, may be permitted to pay with a perfectly good grace. Were they not possessed of singularly interesting mental qualities and endowments, to begin with, their inclinations would never have prompted them to embrace a profession and art in which there are so many vexing obstacles continually to be surmounted, so many disappointments and drawbacks to be suffered as well as the satisfaction and partial compensation to be enjoyed, springing from the consciousness of successful achievement. Conversely, the pursuit of their calling im-



LATTICED SCREEN AT THE END OF THE COURTYARD ENTRANCE, OFFICE OF MR. WILSON EYRE.

The office entrance is to the right.

measurably broadens their purview and draws forth all their resourcefulness and all their most pleasing traits. The manners and methods of such men, how and where they work, with what conditions they surround themselves—all these things have an interest for the general lay public, that portion of it, at all events, that feels any concern for matters architectural and it may be here remarked that the portion so concerned is larger than is ordinarily supposed.

For the past thirty years, those who have followed, even cursorily, the course of development of architecture, particularly of domestic architecture, in America cannot have failed to remark the work of Wilson Eyre. Perhaps they have been charmed by it or, if not temperamentally in sympathy with the spirit and principles of which he is an able ex-

ponent, they are obliged, at least, to admire the ability he has brought into play in treating the buildings he has planned. His contributions, both as regards public buildings and dwellings, have been important and valuable and he has exerted a far-reaching and (most of us believe) salutary influence on the general architectural trend within the period named.

A study of the office and home of one who has wrought so materially for the betterment of American domestic architecture cannot fail of either its interest or lesson for those who believe that an artist should throw himself, heart and soul, into the work he is doing, live with it day by day and make it an inseparable part of his life which reflects the gradual change and growth in his perceptions and opinions and, in turn, reacts upon



THE CONFERENCE ROOM, OFFICE
OF WILSON EYRE, ARCHITECT.



THE OFFICE VESTIBULE, LOOKING INTO MR. EYRE'S CONFERENCE ROOM.

him. Before entering upon a close consideration of his apartments and *atelier*, however, it will greatly conduce to our understanding and appreciation of what we shall see if we take a brief semi-biographical glance at Mr. Eyre's career and note some of his methods in the exercise of his profession. Such a conspectus, too, will necessarily help us somewhat to grasp his personality and enter more fully into the spirit of his work.

A Philadelphian by family, Mr. Eyre was born in Florence and spent his boyhood there. Those early and doubly impressionable years were potently influenced by the mystic spell of the great and glorious past breathed by the very stones of that fairest city of northern Italy. As an enduring heritage from his childhood, there grew up with him a romanticism compounded, if you will be pleased so to label and docket it, of mediaevalism and the spirit of the Renaissance, coupled with and aided by an intuitive perception and love for all that is best in the various forms of art. This early enrichment of tastes, naturally poetic and artistic, has so strongly tinged all his work that, to one at all familiar with it, the unmistakable stamp of his

personality is clearly discernible, no matter in what form of architectural expression he may have chosen to embody his ideas.

The successful practice of the art of architecture requires and embodies the exercise of so many other arts as essentials to its perfection that an architect, far more than almost any other type of artist, has need to be many-sided in his tastes and sympathies or, better still, in his accomplishments. He must be endowed with rare perception, catholic enough in scope to embrace and set a value upon all that is intrinsically good, in whatever connection it may exist. Along with this gift of perception of actual existent merit, must go a discernment and power to visualize, sufficiently broad and far-seeing to adapt and combine sundry excellences into a whole as yet to be created. In other words, the architect must not be a man of sheer cold, mechanical achievement; rather must he possess a wealth of imagination and creative vision and be impelled by the fire of enthusiasm to carry out the fruit of his dreams.



STAIRWAY LEADING TO THE DRAWING ROOM IN THE APARTMENTS OF WILSON EYRE, ARCHITECT.

Such an ideal temperament for an architect does Wilson Eyre in large measure possess. He is exceptionally happy in his faculty of intuitive taste, that intuitive taste that gives inspiration and vitality and is infinitely better than more originality or acquired knowledge. Originality may be crude, knowledge acquired by study and experience, however necessary as a part of one's practical working equipment, may be dead and coldly academic, but God-given, unerring intuition is always fresh, energizing and quickening. Guided by intuition and giving rein to his instinct for picturesque composition, he has enriched every spot where he has built houses, whether in city or country. His city houses have a peculiar distinction and air about them. Without being in any way obtrusive they are strongly individual and seem to possess something of an Old World cosmopolitanism, many of

them suggesting in their appearance a reflection from early Tuscan memories. His country houses display a wealth of invention and a keen perception in adapting each one to the peculiar individuality of the site it is to occupy so that the ensemble shall be wholly satisfying. Here we have a city house of distinctly Italian type, there a country house whose inspiration surely came from Norman sources or another, perhaps, in which we can readily trace a resemblance to an old English manor of late Tudor or early Stuart days, again we may occasionally chance upon a home for whose pattern he has made an excursion into the Georgian field—in every instance, however, be the type and source of inspiration what they may, he has so inwoven his personality and set the seal of individual interpretation that there is no mistaking their authorship.

That authorship is above all else pic-



DINING ROOM IN THE APARTMENTS OF WILSON EYRE, ARCHITECT.

turesque in spirit. It is of the first importance in Mr. Eyre's eyes that a house should be wholly in accord with its environment and form one harmonious whole with its surroundings; with that intent they are designed and composed. It is a comparatively simple matter to *plan* a house, but quite another thing to *design* one. In respect of design Wilson Eyre is particularly strong. In each instance he works over the composition of a house with its surroundings as a painter works over the composition of a canvas and largely from the same point of view, as indeed he must if the finished building is to bear the charm of restful mien and fitness with its setting.

It is in this very regard of his devotion to and insistence upon the pictorial aspect of building, at a time, too, when such insistence was sorely needed, that Wilson Eyre has rendered an invaluable service to American architecture. His mastery of composition, his power to dream dreams and then make them come true in brick and stone and mortar entitles him to our lasting gratitude. He has, it is true, been severely criticised, and at times with reason, for lack of practicality and for sacrificing obvious convenience to pictorial effect. These offences, however, were confined to his earliest work and the grace of these achievements, along with the salutary effect they produced in various ways, ought in some measure to silence the cavillings of narrow utilitarians with their *beau ideal* of stereotyped, unreasoning convention. His later work has happily combined both elements so that the earlier cause of reproach is done away.

Mr. Eyre's attitude towards architectural refinements and certain small matters that too often pass unheeded should also be noted here. Without slighting the broad comprehensive sweep of composition in his masses, he bestows the utmost pains and careful study upon exquisite finish and niceties of detail. From this very fact arises not a little of the subtle charm of his work. In examining his buildings closely, one is constantly coming unexpectedly upon some deftly wrought bit of ornamentation, some care-

fully proportioned moulding, some cunning textural device, set by merest chance, at first seeming, but on reflection proving to be the result of deliberate design. Gradually the conviction dawns that these things impart a tone and grace attainable in no other way and our admiration for the skill of the master designer grows. Mr. Eyre knows full well the value of these details and usually works out the drawings for them with his own hand. Not only that, but he takes a keen pleasure in so doing for he deems the smallest thing deserving of thought and attention and joys in work worthily done. In no other single particular is his delightful mediaevalism more strongly manifest, and, at the same time, his freedom from the taint of sordid commercialism. Furthermore, after completing the drawings, he sees to it that competent craftsmen are entrusted with carrying out the carvings in wood or stone or the paintings or leadings in glass so that the finished work may retain, as far as possible, the spirit he has infused into his designs.

Inasmuch as this paper purports to treat of Mr. Eyre's office and home, to some it may seem that altogether too much space has been devoted to a consideration of Mr. Eyre himself and a criticism of his work in general. It is well to bear in mind, however, that the connection between a man and his home is usually so intimate and so manifold that it does, or ought to, reflect his personality in a way that no other place can and the more we know of him, therefore, to begin with, the better shall we understand what we see as we pass from room to room.

In having his office and home together Mr. Eyre shows much wisdom. An architect is quite as much an artist as a painter or a sculptor and, quite as much as theirs, should the scene of his daily labors be surrounded with objects of interest and beauty and pervaded by an atmosphere of refinement. In an office building this is difficult and well nigh impossible of attainment. Here, however, the spirit of the household spreads itself over the entire establishment. One feels it as soon as they enter the door



LIBRARY IN THE APARTMENTS OF WILSON EYRE, ARCHITECT.

may, even before that, as soon as one turns into the side yard from the street, seeking the door which is not visible till you turn a corner.

As may be seen from one of the accompanying pictures, the house itself differs in no respect from many other Philadelphia houses built about seventy years ago. It has the same unpretentious appearance of Quaker substantiality, cleanliness and amplitude. There, however, the similarity ends. By a piece of commendable co-operation the adjacent side yards between Mr. Eyre's house and his next neighbor's have been turned into an inviting approach to the rear of both properties so that one would really much rather go in the back way than the front. The iron grille spanning the space between the two houses is of excellent workmanship, delicately and gracefully wrought by a cunning craftsman. Perfect independence of property line has

been maintained, as a glance at the parallel, privet-bordered brick walks will show which seem to say "Shinney on your own side" though in an amicable spirit, as they lead to the gates in the high white lattice that hides the kitchen workings. Relieved as it is by tapering cedars and a pillar supporting a headless image, this latticed screen becomes a really decorative feature.

Before reaching it, one turns to the right, enters a wide doorway into the back hall and ascends to the second floor which is wholly given over to the offices, the draughting rooms being in the front part where there is a flood of light streaming through big windows. The entrance is in the outer office which is between the draughting rooms in front and Mr. Eyre's consultation room immediately in the rear. Both business office and draughting-rooms are unlike what one ordinarily meets with, that is if in-

teresting bits of carving, fretted lattices, old pictures and cartoons of old painted glass let into the leaded casements can make them so.

Mr. Eyre's conference room is thoroughly representative of him and quite typical in its furnishing of his judicious eclecticism and happy faculty of combining the most opposite things in a delightfully original manner. In the middle of the room is a block-foot mahogany Pembroke table and the electric bulb above it is covered by a Japanese shade of black lacquer and silver grey paper. American rush bottomed chairs with painted backs, dating from the early nineteenth century, consort with several old green lacquer and gilt Italian armchairs, upholstered in faded damask, in truly cosmopolitan camaraderie. Against the walls on two sides are built-in bookcases and cupboards painted a dull grey. On a drawer of one of these built-in cases is a curiously wrought fretted and engraved iron chest lock with a great circular scutcheon that Mr. Eyre picked up on one of his journeys. The lock is a most interesting thing in itself but it is doubly interesting as exemplifying the way in which Mr. Eyre will take anything of beauty and merit, no matter what its original use, and apply it in some suitable connection. The walls are of dull brown tone, most unobtrusive and restful, and the Adam mantel has been given the hue of ancient browned ivory. Over it hangs a Dutch painting of flowers framed in plain black and on the shelf stands a blue Chinese bowl, on a teakwood base, with flanking vases of blue Delft. On the walls are several excellent old prints and opposite the fireplace, between two windows, hangs a tapestry in front of which, on a carved oak chest, stands a crimson-robed Madonna taken from some dismantled church or monastery. Notwithstanding the heterogeneous character of the furnishings the room has a delightfully harmonious tone and approves Mr. Eyre's principles of selection. He dislikes the narrowness that would rigidly insist on always having everything in one given place absolutely in one special style. If sundry objects are beautiful, and your

intuitive taste tells you they will go well together, by all means put them together whether they technically "belong" or not, whether some be Chinese and some German and others Louis Quinze or, perchance, Hepplewhite and let the rigid proprieties go hang, so long as the result is successful.

From the conference room a door opens into Mr. Eyre's own private draughting-room, also done in grey, where the walls are adorned with sundry pictures, tapestries and embroideries. Here, too, are some interesting pieces of old Italian furniture and various fascinating odds and ends that he has picked up in all sorts of places and at all sorts of times. These "finds" are frequently incorporated into some new work whenever a particularly felicitous place suggests itself. Beyond the draughting-room are Mr. Eyre's living room, bedroom and bath, so one may readily see how close he lives to his work. In the living room the prevailing tones are subdued browns and greens with an occasional bit of bright color flashing out from some of the many engaging objects assembled there.

One cannot grasp the whole charm of Mr. Eyre's offices or apartments unless one is able to see the color. The walls, hangings and carpets are all subdued and unobtrusive—in fact one is not conscious of them separately, but only of a thoroughly restful whole. There are, however, occasional flashes of brilliant color in all the rooms that are most effective and livening. One interesting feature of the living room is the window in the corner that has been made to replace an ordinary light. A capacious window seat fills the lower part, and cartoons of painted glass, picked up in Europe, let into the leaded casements lend a note of unusual interest.

On the stairway ascending to the dining room and drawing room we see two wonderful old Japanese panels and between them a grotesque mask. One of the panels hides the ugly door of an electric switchboard and the mask conceals a stopped gas connection. Prosaic uses, indeed, but thoroughly characteristic of the way Mr. Eyre has of hiding all dis-

agreeable things with something beautiful, in fact making them excuses for beautification.

Surely no one ever possessed greater aptitude for taking all sorts of things and converting them to ingenious and beautiful purposes. A look at the hall and stair going up to the drawing room is a justification for this remark. It is rarely that such a diverse collection of things is brought together and rarer still for harmony to reign in its midst. To name only a few of the things, we have a Japanese print surmounted by a wonderfully wrought iron cross from some old ecclesiastical building, a Moorish inlaid cabinet, an eight day hall clock, a painted Empire sofa, an Eastern hanging brass lamp and doors from an Italian house, adorned with gilt panels decorated in Chinese style.

Drawing room and dining room are as interesting in their ensemble as the rest

of the apartments and all are eloquent of the habits and tastes of the occupant. If a biologist can tell us everything about an extinct snail from a study of its shell, after seeing a house we can tell ourselves a good deal about the manner of living man that abides in it. That Mr. Eyre is ingenious and has an eye to practical convenience, notwithstanding his detractors, we should infer from the admirable pulley device for adjusting the height of the electric drop light in the drawing room. Other little touches of all sorts and the general arrangement of the rooms are strongly indicative of tastes and preferences. Catholicity of appreciation for both form and color we find evidenced at every turn and, at the same time, we are just as strongly impressed with the quiet simplicity and admirable restraint that stops just at the right place. The green and gold consoles and frames of the Italian chairs in



DRAWING ROOM IN THE APARTMENTS OF WILSON EYRE, ARCHITECT.

the dining room might prove garish in many places, but in their own well balanced setting they are unexceptionable. The compensating values of course have been deliberately calculated.

The lesson to be learned from a visit to such a house is extremely difficult to

put into words; it is a thing to be felt rather than talked about. One thing, however, must strike even the least observant and that is the entire consistency of the household and office with the characteristics of Mr. Eyre as continuously exemplified in all his work.



THE PRIVATE DRAUGHTING ROOM OF WILSON EYRE, ARCHITECT.



City Planning in St. Louis.

The City Planning Commission of St. Louis has issued in book form its reports of July 9th, 1912, and January 7th, 1913, binding them together. As a first step towards the comprehensive city plan which it was authorized to prepare, the Commission advocates what it calls a "Central Traffic-Parkway." This is to extend from Twelfth Street to Jefferson Avenue, occupying the space between Market and Chestnut Streets, and thus passing the front of the Union Station and the Municipal Court and new City Hall. It will have a width from the north side of Chestnut Street to the south side of Market Street of 287 feet. This will make possible its development as one of the finest traffic parkways in the world, for the Champs Elysees is only 250 feet wide; Unter den Linden, in Berlin, but 190, and the Ring Strasse, Vienna, only 185. Several tentative plans for its development are discussed. These provide for street car passengers, business and pleasure vehicles, pedestrians, and park spaces. With references to the latter, the report remarks that "all of St. Louis cannot live west of Grand Avenue. There is a down town population and will be a down town population for generations to come." It is estimated that upwards of 100,000 people now live within easy walking distance of the proposed parkway, though it is only twelve blocks long. This tributary district is almost without parks. In its great breadth, the avenue would make a fire guard of inestimable value. The prediction is made that it will become the most frequented and popular thoroughfare in St. Louis. It will furnish a pleasant and rapid traffic connection between the business and residence sections, and it passes through a blighted district in which, in spite of its central location, real

estate values have been steadily falling for many years. This, it is interesting to observe, is due partially, at least, to the fact that the lots between Market and Chestnut Streets are abnormally shallow.

The report for January, 1913, which is bound with the suggestion of the traffic-parkway, contains the text for a long charter amendment, and the arguments therefor. The purpose of this amendment is to facilitate the establishment of parks and parkways, by making easier the methods of acquirement. The changes contemplate an equitable division of cost between the city as a whole and the benefited district; the payment of benefits by installments, and the expediting of court procedure.

Restoring Old South.

Bostonians have been bravely undertaking interesting but dangerous tasks of restoration. When the "Old North" church had been made to look again as it did when Paul Revere hung his lanterns in the belfry, work has commenced on the "Old South." Strangely enough it has not proved possible to secure an accurate description of "Old South's" original appearance. One would think that an edifice which had entered so closely into the life of the city must have been often pictured and carefully described; but the architects, Bigelow and Wadsworth, who have been retained to supervise the work of restoration, have sought the church records in vain, and have interviewed print dealers and collectors with scant results. An interesting example of the difficulty of getting at details accurately is to be found in the search for information as to the original window sashes. On this point two sources of information were finally discovered. One was a sketch made for an en-

graving to be placed on a silver pitcher which was presented to Isaac Harris in recognition of his services in saving the building from destruction by fire in 1810, and the other was an aquatint of the same date. The first shows the lower sash as five lights high on the second story and sometimes four and sometimes six lights high on the first story. On the other print all the sashes are shown as eight lights high. But prints of any sort are extremely rare. As a first step, which is entirely safe, the paint has been removed, the walls being thus restored to their original red brick. They were first painted in 1814, when the church was nearly a hundred years old. Other changes which are contemplated are the replacing of the granite pilasters and pediment of the Washington Street entrance, and the replacing of the Milk Street porch, by similar features in wood with a detail appropriate to the buildings of that period; the painting of the steeple white, and the replacing of doors, fanlights and sashes. On Easter morning the rehung bells of Christ Church—the "Old North"—were rung after many months of silence, in celebration not only of the religious festival, but of the completed restoration of the edifice. Through the subscriptions of Paul Revere descendants, the bells hang on new stocks in new frames, where they can be either chimed or pealed—so gaining a larger usefulness than they had ever had.

Big Schemes for Montevideo.

The London Times reports that as a result of the city planning competition, held some months ago, the city government of Montevideo has given its approval to a very extensive and ambitious project which will practically transform the city. The main feature is the construction of a number of direct and diagonal wide avenues running between various parts of the city, the port, and the principal suburbs. Along these, sites are provided for a new government palace, a palace of justice, a national museum and library, a municipal hall and municipal theatre, a new general post office, and various other edifices of a public character. The government does not propose to undertake these constructions all at once. Its intention is to commence with the new government palace, and with two broad avenues connecting that with the new legislative palace (already partially

built) and with the port. This, however, seems a pretty good beginning. The site selected for the government palace is on the outskirts of the city, and to provide it the government has already decreed the expropriation of twenty "blocks" of land, each block consisting of about 11,000 square yards. Only one-fourth or one-fifth of this space will be actually occupied, the idea being to resell the remainder (present owners being allowed the preference) at an increased value, as a source of revenue, and, with the same object, to impose a "higher value" tax on all adjacent properties. The same system will be followed in the expropriations necessary for building the avenues. These plans are viewed with some alarm by property owners, for, if the entire scheme is carried out, there will be hardly any property in the city which may not eventually be affected.

Saving St. Paul's.

The ruin of St. Paul's in London is again averted, for it has been decided that the trams shall not go past it. Ruin of the great Cathedral from a jarring of the trams may seem a strong expression, but the controversy which has raged in the London newspapers upon this point is hardly less than that which has wearied New Yorkers with reference to new subway contracts. It will be remembered that Sir Christopher Wren boasted that when he built St. Paul's, he built it for eternity, but St. Paul's foundations rest on water-bearing deposits, and between the drainage of this soil and the very considerable covering of it with buildings and pavements which admit no water, there has been a subsidence that has cracked the heavy walls to such extent that any additional jarring is not a matter to be lightly dismissed. The Dean and chapter, rising in defense of the ancient structure, have given a fine example of the church militant, and they have very cannily improved the opportunity to secure considerable contributions for repair work. Their appeal for this purpose asks for £5,000, which, however, they take pains to explain is only for preliminary work, such as the cementing of the cracks. It was no slight task which confronted them in heading off the action of the London County Council so as to prohibit the jarring trams from venturing too near. It really did require a national agitation, and the protests and petitions of distant bodies, such as that by the Architectural Association of Birmingham,

New City Plan Reports.

Several American city plan reports have recently appeared and are of interest as a somewhat different method of treatment than that are made familiar by the elaborately published reports of the past. In fact, it is noticeable that the recent city plan reports have been brought out much more modestly. Their various authors seem to have been getting away from the draughting table and the picture plan; and instead of costly books, filled with beautiful photographs and drawings, and putting their emphasis on an architectural civic center, we have small pamphlets, or handbooks, containing much text in which there is earnest discussion of many practical matters and in which the sociological point of view is conspicuous.

The latest report of this kind, which appeared the middle of April, was that for Houston, Texas, by Arthur Coleman Comey. It is issued in book form with stiff covers, and is notable for the thoroughness of the Survey on which are based the recommendations of the report. A final chapter on legal aspects of city planning contains a valuable compilation of pertinent acts and ordinances. A discussion of building control, in which special attention is devoted to the restriction of building height, is of particular interest. A report for Colorado Springs by Charles Mulford Robinson, also issued in book form, appeared a few weeks before Mr. Comey's report for Houston. In this particular emphasis was placed on a discussion of the street plant. Somewhat earlier yet, appeared a small pamphlet report by George B. Ford and E. P. Goodrich, of the City Planning Commission of Newark. This contained much interesting discussion this subject being taken up as the phase of the problem which required immediate consideration and thorough discussion. Some weeks earlier Charles F. Puff, Jr., of the Board of Public Works, had brought out an elaborate report entitled City Plan of Newark. This contained such interesting discussion and data. A report by Frederick L. Ford, city engineer of New Haven, discussing in detail a street rearrangement which is made desirable by the new station, has been issued in pamphlet form and affords another illustration of the new spirit in city planning. Of the report of the St. Louis City Planning Commission, also devoted to specific details, mention is made elsewhere. These reports indicate, if such indication were necessary, that the city plan-

ning movement is still very much alive, and they suggest from their practical, work-a-day character that it is getting on a healthier and more helpful, if less ambitious, basis than heretofore.

Progress at Letchworth.

The financial reports of Letchworth, England, which were made at the recently held annual meeting of the First Garden City Limited, were of special interest. Last year's report showed, for the first time, a profit, this amounting to £200. This year the profit exceeds £3,000. The chairman of the Board stated, in his address, that the business of the Garden City was not of a character which lent itself to fluctuating results. The income consisted almost entirely of rents and of receipts for gas, water and electricity, which did not fluctuate much but steadily increased year by year with the growth of the population. The town had now reached a stage, he said, which made it safe to treat the revenue of the company as really revenue, and not to go on paying out of it considerable sums for future development, as had been done in the past. He anticipated that the profits of the year which has now opened would justify the payment of a dividend of $2\frac{1}{2}$ per cent. on the share capital for the year, and he believed that when the payment of dividends had commenced, they would continue without stoppage. During the last twelve months, 800 people, he stated, had been added to the population. Each new industry or extension of an existing industry meant a demand for more houses, and these were being constantly supplied by the cottage building association.

A City-Building Congress.

Voluminous circulars are being issued (in French) of the International Congress and Comparative Exposition of Cities which is to be held in Ghent, July 27 to August 3, in connection with the Universal Exposition in Ghent. The program of the Congress provides for two main sections: I, on The Building of Cities; II, on The Organization of Municipal Life. The first section is in its turn subdivided into two parts: A, The construction of new quarters; B, The conservation and management of a city's older quarters. In a special circular which contains a list of the questions to be

considered in the different papers, and the selected writers of papers, it is interesting to note the overwhelming predominance of architects. Out of twenty-one speakers chosen to discuss the building of cities, fourteen are architects. These include Rey, of Paris; Gurlitt, of Dresden; Cuypers, of Amsterdam; and Brunfaut, of Brussels; besides many who are less well known on this side of the ocean. No American or Englishman is on the preliminary list, though the English Town Planning and Garden City Exhibit is advertised as an important section of the exposition. Professor Geddes, of Edinburg, is down, however, for a general paper in the second section of the Congress—that devoted to the organization of municipal life. In this section, financial, economic and social questions are considered.

In the first section of the Congress, many of the questions are, as might be expected, of an architectural character—as whether the rule of absolute parallelism on the two sides of a street might not well give place to a greater liberty in the determination of alignments; as whether the creation of *rond-points*, breaking the long streets of modern cities, is to be approved; as whether it is necessary “to construct monuments that shall break vistas,” and questions as to the height of buildings, competitions for beautiful façades, the disengagement of ancient buildings, etc. It is proposed that as regards “*l’Art de bâtir les villes*,” the Congress shall continue and develop the important work already done in former congresses and expositions,—notably in those of Dresden (1903), Berlin and London (1910), and Düsseldorf (1912). The undertaking is endorsed by the usual imposing list of honorary and ordinary presidents, vice-presidents and secretaries—general and plain.

American Art.

The committee on Art in the Public Schools, of the American Federation of Arts, sent out a year ago to a selected list of between two and three thousand persons, circulars inviting an expression of opinion with regard to the best works of art in the United States in architecture, sculpture, mural decoration, painting and handicraft. Only about seventy of the blanks were filled out and returned—a very disappointing response which robs the result of the value it should have had as an

expression of the artistic judgment of the country. Until the names of the seventy persons who voted are given, little authority can be attached to the returns. Nevertheless, an examination of the fifteen works of art given first place in each group is not without some interesting suggestions.

It appears that under the heading of architecture, four of the fifteen structures are the work of McKim, Mead and White. This is exclusive of Madison Square Garden which is credited to White alone. If that were included, it would appear that one-third of the “best” fifteen buildings in the country were planned in one office. In sculpture, pretty much the same condition is revealed, five out of the sixteen selected pieces being the work of Saint-Gaudens. Three are the work of MacMonnies. In mural painting, four out of the fifteen chosen examples are the work of Blashfield. The geographical distribution is not less uneven. Of the works of architecture, eight are in New York, three in Washington and two in Boston. Of the works of sculpture, seven are in New York, three in Washington and two in Boston. Of the mural paintings, two are in New York, four in Washington and three in Boston. Of the paintings, five are credited to New York, one to Washington and four to Boston. It would appear that in those three cities one might see most of the art of the United States. In point of time, also, practically all of the work listed is very recent. Of course, in any such census some allowance must be made for the jurors’ limited observation, and the special emphasis which the spirit of the time tends to place upon current work.

The City Planning Conference

The fifth National Conference on City Planning was held in the Hotel LaSalle, Chicago, May 5-7. As this was the first time that the Conference had gone west of New York State, it is significant that the non-local attendance was as large, at least, as it has ever been and probably somewhat larger. It is still true, however, that the attendance of architects is much slimmer than it should be.

The Conference opened as usual with an evening session at which the leading paper was presented by Frederick Law Olmsted, the chairman of the Conference. His paper was substantially an argument favoring the creation of a city planning depart-

ment as a portion of the municipal government and it looked forward to a time when this would be generally done. Mr. Olmsted was followed by the secretary of the Conference, Flavel Shurtleff, who gave a rapid-fire summary of the year's progress in city planning. This was most interesting and inspiring. The session of the second day considered city planning surveys, various legal questions, and an explanation of the Chicago plan. The evening session, under the chairmanship of Bion J. Arnold, of Chicago, was devoted to problems of transportation, with the major paper by Milo R. Maltbie, of the Public Service Commission of New York. This was an admirable paper, and was followed by a very live discussion which lasted until a late hour. On the final day, George E. Kessler described the financing of the Kansas City Park System in the morning session, and the afternoon session was largely devoted to a discussion of the plans submitted to the Committee on City Planning Study, showing schemes for subdividing a hypothetical tract of land. This proved one of the most stimulating and valuable features of the Conference.

The entertainment features of the Conference were wisely reduced to a minimum. They consisted only of a luncheon at the South Shore Country Club, an automobile tour of the parks and boulevards, a luncheon at the City Club, and a closing banquet. At the latter, the souvenir was a handsomely issued volume reproducing, from plates of the Chicago Plan Report, the beautiful plans and paintings which so distinguish that Report.

One of the most interesting features of the Conference was a round table luncheon that was not on the program. This was held under the chairmanship of Edward M. Bassett, of New York, and was devoted to a discussion of building height restriction. A roll of the cities was called, the delegates from each reporting in a few words what his city had done or attempted doing. Another very valuable feature of the Conference was the issuance of a printed Report by the Committee on Legislation. This contained the text of acts, covering the various phases of city planning, which had been prepared by the Committee as suggestive models. Among the subjects covered by these proposed acts, were the creation of city planning departments, of metropolitan planning commissions, the giving to towns and cities of the right of excess condemnation, and of the right to create building zones, to plat civic centers, to establish building lines, etc.

At the brief business session of the Conference it was decided to continue it in the present informal way, unhampered by a constitution. The former officers were re-elected.

Lamp-Standard Competition.

An ornamental gas lamp standard has been the subject of an interesting and practical competition in St. Louis, as a result of an arrangement between the Civic League and the Board of Public Improvement. The City Lighting Department finding the existing lamps unsatisfactory, the Municipal Art Committee of the Civic League volunteered to conduct a competition which should secure a better one. Circulars were sent to architects and draftsmen announcing a prize of \$50 for the best design. Thirty-five designs were submitted to a jury consisting of S. L. Sherer, architect; F. E. A. Curley, curator of the City Art Museum, and William Booth Papin. The winner proved to be Hugo Graf, a draftsman in the architect's office of the Board of Education. The Committee proposes to conduct competitions for other objects.

The Dusseldorf Award.

In the field of city planning the awards in the Dusseldorf competition are not of less interest than was the award in the competition for the Australian capital. If the city planners had a less free hand in planning the extensions of an existing and already beautiful city than they had in the creation of a new capital city, their problem was of a much more typical character. Moreover, while the terms of the Australian competition were such as to discourage entrance by many of the most gifted and experienced city planners, the terms of the Dusseldorf competition, which also was open to the world, were such as to invite the participation of those who have most studied the new science. Yet the conditions imposed seemed to require almost necessarily a German type of city planning.

Unfortunately, reproductions of the premiated designs have not yet appeared in this country, nor does the official statement as to the awards declare how general was the international participation in the competition. The English "Town Planning Review," however, notes that the accepted scheme "is of a particularly modern Ger-

man type, remarkable for its fullness and minute care." The prize winners are all Germans. The first prize goes to Professor Dr. Ing. Bruno Schmitz, of Charlottenberg, and Professor Dr. Ing. Blum of Hanover; the second prize to Professor Bruno Mohring, Berlin, Municipal Councillor of Building, Bonne, and Government Architect Rogg, of Düsseldorf. Five prizes were awarded, and in addition four other designs were purchased at the suggestion of the Jury of Award.

The Real Prince Rupert.

A correspondent of the Boston Transcript who has been making a visit to Prince Rupert, the fiat city which the Grand Trunk Pacific Railroad has been building as its western terminus, gives an interesting glimpse of the actual beginning of that city, so bravely planned before a sod was turned. It is already a town of some four thousand inhabitants, and the correspondent thinks that there is no doubt that its site, abutting deep water on an excellent harbor, was well chosen; nor does he question that within a decade the town will have a hundred thousand population as the genuine terminal city of a great transcontinental railroad. He does question, however, whether the main residential section will be on the island upon which the city has been planned. "Sites," says he, "much more suitable for residences appear to lie on the north side of the harbor, seemingly half a mile distant, easily reachable by future ferry." The land there, much of it thoughtfully "reserved" by the railroad company and the British Columbia Government, appears, he says, lower and less hilly. The two thousand acre portion of the island which was city-planned some four years ago, and from which lots have been extensively sold, is still, he declares, very rough. "The Grand Trunk Pacific Company cleared it of heavy forest and expended some \$200,000 in providing streets, which were located more or less sinuously, with reference to many rocky knolls. These streets have now planked roadways and sidewalks, often carried on trestles over soft 'muskeg' soil, or an accumulation of forest decay for ages and ages in a very moist climate. There are few lots whose area does not include some hillside. Many houses—all of which must be regarded as temporary structures soon to be replaced by business blocks—are propped up on

trestle work, sometimes twenty feet or more in height. Large parts of the main streets have been levelled by drilling and blasting. On their sides remain rockfaces, sometimes thirty feet high. Up on these sides are often considerable buildings—for instance, the Prince Rupert Clubhouse—from beneath which the supporting rock is or soon will be in course of removal, props replacing the rock as fast as it can be taken away. A deep ravine, with sides of pretty steep, yet gradual incline, intersects the 'city.' Its whole site, where unbuilt on, is largely a scene of more or less blackened stumps. In places sewer ditches traverse 'muskeg' six feet deep. At other points they run through rock. Altogether the city site is far rougher than the western portion of Manhattan was thirty years ago." It is obvious that large sums must be expended before Prince Rupert can attain the Western Canada standard of a modern city. It is probable, the correspondent surmises, that it is the cost of these future improvements which has kept real estate down to a level which is low compared to prices in Vancouver, Calgary, Edmonton and other cities, considering the great future of the city. In that he professes confidence.

Philadelphia Art Museum

One of the most important architectural events of the year is the completion, and publication, of the plans for the great Art Museum of Philadelphia which is to be erected on the site of the discarded Fairmount Park reservoir. The plans for the building were drawn by Horace Trumbauer, C. C. Zant-zinger, and C. L. Borie, Jr. They contemplate a magnificent structure which its unique site will render monumental. The façade will be four hundred feet long, and it will crown a terrace forty-six feet above the level of the plaza that marks the end of the noble new parkway, which terminates at its further end in the City Hall. The building will overlook the Schuylkill river and the park, standing in a splendid isolation which at once gives to it conspicuousness and insures the safety of its collections. The style is described as Greek with Renaissance detail, "noble in simplicity, classical in outline, spacious in content, and in accord with its situation." The structure is approached by a terraced stairway, of which the divisions correspond with the divisions of the parkway. This in itself offers an unusual opportunity which

has not been overlooked. The portion of the building to be immediately erected will cost, it is estimated, about \$3,000,000, and \$200,000 is at once available for the preparation of the site. With its future extensions, the structure as planned will exceed by 2,000 square feet the area of the Louvre in Paris.

Private Gift of Public Bridges.

The private gift of public bridges is urged by the Metropolitan Improvement League of Boston, in its latest bulletin. The League points out that the Larz Anderson bridge, which is to connect the Harvard Stadium with Cambridge, will be the fourth handsome structure across the Charles river below the Watertown dam. Adding that "six very ugly and inadequate ones remain to be replaced;" the opinion is then expressed that a person of large wealth could hardly erect a more beautiful and useful monument than by constructing a handsome bridge which would be of constant public service. It is urged particularly that a substitute for the present Harvard bridge, which would offer worthier approach to the new site of the Massachusetts Institute of Technology, would be a noble gift for some generous alumnus to make. It is a fact that there are few forms of public construction in which recent years have shown greater aesthetic advance than in bridges. The iron age, spelling artistic ruin for a while, robbed private beneficence of inspiration; but since that period seems to have passed, it would not be strange if public spirit, ever seeking new forms of expression, should now assert itself in the private gift of bridges.

Honor for M. Benoit-Levy.

Many persons in this country will be interested in the announcement that M. Edmond Benoit-Levy has been named Chevalier de la Legion d'Honneur. In honor of the event, M. Benoit-Levy was given a banquet followed by a ball at the Hotel Continental on December 11th. The members of the society entitled Les Amis de Paris, of which he is president, presented him with a work of art, and an album in which were written the names of the subscribers.

Two Capitol Awards

The following note was received some time ago from the Washington Chapter of the American Institute of Architects, and will serve to correct several misstatements which

have recently appeared in print:

While rejoicing in the successful conduct of the Missouri State Capitol competition, in accordance with the code governing competitions of the American Institute of Architects, and while joining with the St. Louis "Republic" in congratulations to the people of that commonwealth upon the manner in which the selection of architects was made, it appears proper to notice, in the interest of an accurate record of the progress of architectural practice in America, that the above-mentioned journal, under date of October 8, 1912, in commenting upon the subject, and *The Architectural Record* of December, 1912, in quoting therefrom, said:

"For the first time in the history of American architecture a State Capitol design has been selected in conformity with the rules of the American Institute of Architects"; and also: "On this important matter, of deep interest to every citizen in the State, Missouri has set an example to the country."

Now, whereas, the State of Washington, through its Commissioners acting upon the advice and with the assistance of the Washington State Chapter of the American Institute of Architects, did, in 1911, conduct a competition for its Capitol Buildings in accordance with the code governing competitions of the American Institute of Architects, and

Whereas, in acknowledgment of such advice and assistance the secretary of the commission wrote to its advisor as follows: "I think I voice the sentiment of the State Capitol Commission when I say that each and every member congratulates himself upon the fact that we did select our architect through this form of competition."

Therefore, be it resolved, that the Washington State Chapter, American Institute of Architects, furnish to the St. Louis "Republic," *The Architectural Record*, and the Committee on Public Information of the American Institute of Architects a brief statement setting forth the true facts of the Washington State Capitol competition and a copy of this resolution.

"Honor to whom honor is due"—both States are to be congratulated upon the admirable conduct of their capitol competitions.

The
Philadelphia
Exhibition.

T-Square Club.

Of course a great deal of local interest centered in the exhibit of the Commissioners of Fairmount Park, of seven drawings for the proposed Museum of Art, upon which Messrs. C. L. Borie, Horace Trumbauer and C. C. Zantzinger worked as associates.

As a general comment upon the exhibition it might be mentioned that there was a small showing of the Allied Arts—not only smaller than the 1913 Architectural League exhibition in New York, but smaller than has been usual in the Philadelphia show. There was, however, to a noticeably marked degree, the highly commendable note of general consistency in local exhibits which has always been characteristic. As always the critic was impressed by the peculiarly intimate and domestic flavor of the Philadelphia residential work—the exhibits from New York, seeming, by comparison, to be visitors from another world—urbane and civil, to be sure, but a little cold and impersonal. In this connection a prominent Philadelphia architect may be quoted as having said the New York entries show a far abler grasp of large monumental problems than was evidenced by local exhibits, but that the Philadelphians are far ahead in their rendering of the domestic type. As a generality this is certainly true, if one were only to instance Wilson Eyre's beautiful "Fairacres" at Jenkintown, and perhaps the reason lies in a marked affinity with English domestic architecture.

The exhibition showed that Mellor and Meigs, D. K. Boyd, Wilson Eyre and McIlvaine, Charles Barton Keen, Heacock and Hokanson, E. C. Gilbert, Baily and Basset and Brockie and Hastings are more than holding their own, and are contributing as earnestly and ably as always to the maintenance of an already high standard of architectural achievement in and around Philadelphia. This division of the exhibition was saliently characterized by the work

of Duhring, Okie and Ziegler. Photographs and plans of the new offices of Mellor and Meigs were intensely interesting.

Day Brothers and Klauder struck a splendid note in their twelve drawings for new college buildings at Princeton, which remind that this firm, as well as Cope and Stewardson, excel in their cis-Atlantic renditions of English scholastic architecture.

Thomas, Churchman and Molitor showed an unusually strong and interesting Jewish Synagogue—a building remarkably dignified without being bizarre. Of the Philadelphia craftsmen, Samuel Yellin, a wizard in wrought iron work takes a pre-eminent place, and H. C. Mercer and the Enfield works showed in their entries how much of craftsmanship and of decorative architectural possibilities lie in tiles. Mention should be made of the remarkable photographs shown by Ph. B. Wallace, who renders a potent service to architecture at large not only through his conscientious pictorial records of old work, but of contemporary work as well.

Most prominent among the New York exhibitors were McKim, Mead and White, Cram, Goodhue and Ferguson, Donn Barber, Tracy and Swartwout, H. Van B. Magonigle, Delano and Aldrich, John Russell Pope, Ingalls and Hoffman, Albro and Lindeberg, Grosvenor Atterbury and Aymar Embury, 2d. These architects showed, for the most part, the work which they exhibited earlier in the Architectural League of New York show, reviewed in the *Architectural Record* of March, 1913, and the entries seemed all worthy of a second study.

Reverting to the comparison (dangerous as comparisons are) made above in speaking of the distinct attainments of New York and Philadelphia architects, it is certainly not the intention to imply that one group or the other may be better architects. One does not consider it intelligent to say that a baker is better than a candle-stick maker because the first can make better bread—"each to his task, etc."

But it is interesting to find, as one finds best in these exhibitions, how astonishingly local is American domestic architecture. Work around New York seems very different from the same class of work around Chicago, and the type of Philadelphia and its vicinity is surprisingly different from either.

THE ARCHITECTURAL RECORD



Boulogne l'aîné peint

L'ARCHITECTURE

B. Avdon Jr.

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DETAIL, RESIDENCE OF MISS ELLEN
D. SHARPE, PROVIDENCE, R. I.

THE ARCHITECTURAL RECORD

Volume XXXIV

AUGUST, 1913

Number II



RESIDENCE OF FREDERICK AYER, ESQ., PRIDES CROSSING, MASS.
Parker, Thomas & Rice, Architects.

NOTES ON THE WORK OF PARKER, THOMAS & RICE OF BOSTON AND BALTIMORE



THE REMARK has frequently been made that in New England and particularly in the vicinity of Boston, the English tradition in American architecture has lingered most tenaciously. Just how the English architectural tradition should be described it is not easy to say, but it seems to have had at least three dominant characteristics. In the matter of style it was extremely eclectic, but with a tendency in the direction of secular Gothic. In the mat-

ter of design it was not very conscientious and was not informed by any very exactive standard of technical practice. Finally, it sought above all to be unpretentious, and in the case of domestic buildings somewhat personal. It achieved its greatest successes, not by virtue of much architectural knowledge or skill or of any instinct for the fundamental proprieties of architectural form, but because of the way in which an architecturally negative building obtained dignity and confirmation from the manner in which it is used. The better class of New Englanders, like the better class of Old Englanders, always treated their buildings with respect, and consequently the



ENTRANCE DETAIL, RESIDENCE OF FRED-
ERICK AYER, ESQ., PRIDES CROSSING, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



DETAIL, RESIDENCE OF FREDERICK
AYER, ESQ., PRIDES CROSSING, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



THE TENNIS AND RACQUET CLUB, BOSTON, MASS.
Parker, Thomas & Rice, Architects.

buildings themselves improved and mel-
lowed with age. Their architecture de-
rived its value less from any technical
merits than from its association with a
sincere and continuous method of life.

This English architectural tradition
has always been and is still a powerful
influence in determining the new forms
which American architecture assumes,
and its effect is by no means confined to
New England. Previous to 1880 it pre-
vailed throughout the entire country.
Between 1880 and 1890 other influences
began to be important, particularly in the
vicinity of New York, and after 1890
these influences practically took posses-
sion of the metropolitan architectural
field. Among these newer influences the
one which was most definitely opposed
to the inherited English tradition was
that derived from France. An increasing
proportion of American architectural
practitioners directly or indirectly re-
ceived their training at the Ecole des
Beaux Arts, and the immediate effect of
this training was fatal to the English

tradition. The characteristic merits of
a building designed in the French method
were wholly different from the charac-
teristic merits of the Anglicized Ameri-
can architecture. The new Beaux Arts
practitioners frowned on the rather
meaningless eclecticism of the past.
They sought to introduce into this coun-
try either modern French forms or those
of the latter part of the eighteenth cen-
tury. They insisted upon a much higher
standard of professional practice, par-
ticularly in preparing the plans for their
buildings, and in this respect they made
their greatest single contribution to the
improvement of American architectural
methods. Finally their buildings were
frankly pretentious. French art, and
particularly French architecture, has
rarely been diffident, unassuming and
personal after the manner of so much
English art and architecture. It has been
frankly self-confident and rather liked to
exhibit its charms to the public.

The effect of this infusion of French
blood into the American architectural

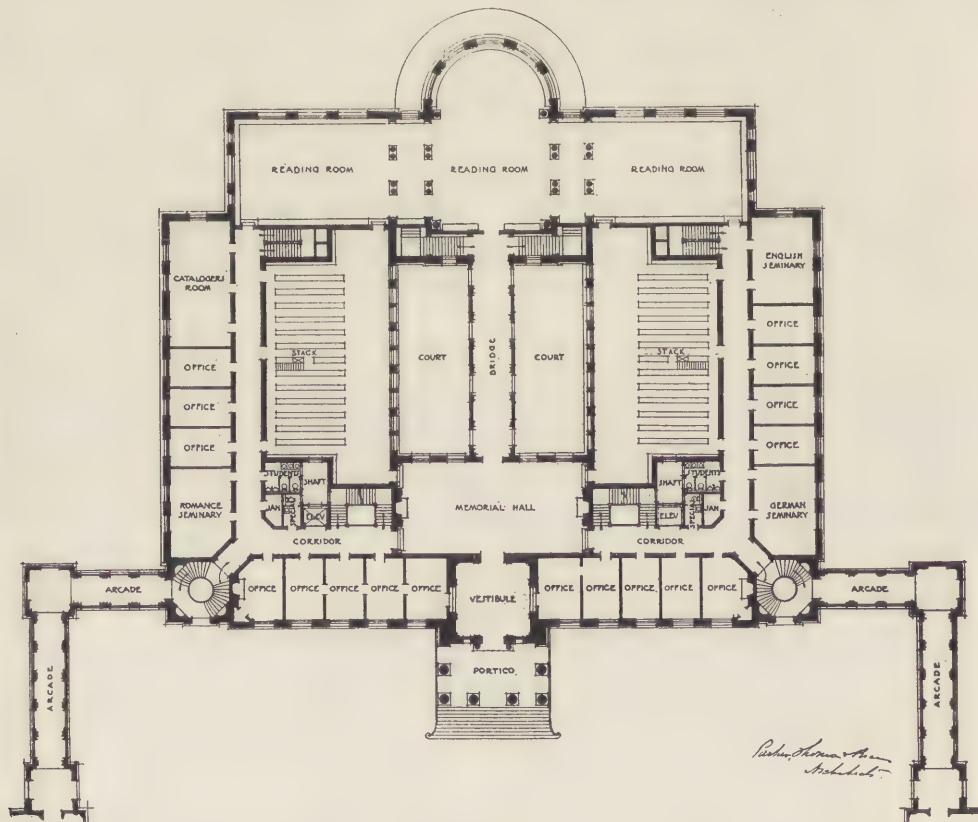


THE "A-D" CLUB HOUSE, CAMBRIDGE, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.

stock was extremely valuable. A great increase in competence and vigor was the immediate result, and this increase in competence and vigor was not confined to the architects who had been trained in France. Those who remained true to the English tradition were obliged to borrow from their opponents the better parts of the French methods. They were obliged to abandon to a certain extent the indiscriminate eclecticism of the past and to give some consistency to their architectural forms. They were obliged also to pay more attention to the technique of designing and planning. The plan of the average building in particular was very much improved, and it was improved just at the time when American business began to demand increasing efficiency in this respect from American architects. Finally even the increased pretentiousness was not without its de-

sirable aspects and results. American architecture needed self-confidence and energy. It needed the advertising which it could get only by boldly claiming the attention of the public and insisting on recognition. Considering the condition of American artistic opinion twenty-five years ago, anything was better for American architecture than public indifference and neglect, and during the intervening period the area and intensity of the public interest in architecture, while it still leaves much to be desired, has very considerably increased.

While the underlying movement of American architecture during the past twenty-five years may be described as a conflict between an inherited English tradition and the new French methods, this formula is far from exhausting the alternatives which were being offered to American architects during this very



PLAN OF THE ACADEMIC BUILDING FOR JOHNS HOPKINS UNIVERSITY,
BALTIMORE MD.

Parker, Thomas & Rice, Architects.



PERSPECTIVE DRAWING OF THE ACADEMIC BUILDING FOR JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD.

Parker, Thomas & Rice, Architects.

fruitful period. On the contrary, the majority of good American architects did not allow themselves to be caught definitely on either one side or the other of this conflict. They accepted cordially the higher standards of technical practice, the increased artistic self-confidence and the diminishing eclecticism characteristic of the French method, but they understood that under American conditions a certain freedom of choice among historic styles was necessary, and they understood also that particularly in domestic architecture, unpretentiousness, if not, mere diffidence, was more characteristic of better American manners than the desire for display. The more successful modern American designers have taken all that was best from the French architectural method without adopting the mere modern French mannerisms, with which these methods are associated. What American architecture needed was the results of the improved French training and courage, which comes from the consciousness that architecture has a public function to perform and must proclaim its own value. This it has obtained,

and the process of obtaining it has been accompanied by an increase instead of a diminution of American architectural individuality. The names could be mentioned of a score or more of architects and architectural firms who have taken advantage of the opportunities of the last twenty-five years to give expression to a peculiarly personal vision of contemporary American architectural needs.

The quality which the better American architecture has obtained during this period was admirably defined by Mr. John Galen Howard in an address recently delivered before the National Institute of Arts and Letters. He detected in architectural firms as far apart in their methods as Messrs. McKim, Mead & White and Cram, Goodhue & Ferguson, an underlying largeness of architectural conception which gave to their work the rare and great merit of style—a merit which was independent of the styles which these firms adopted as the occasional source of their buildings. Style, as Mr. Howard admits, is an extremely difficult quality to define, but it appears at least to possess two ingredients. It is



DETAIL—THE GLOUCESTER APARTMENTS,
BOSTON, MASS.

Parker, Thomas & Rice, Architects.

a highly individual characteristic, but its individuality is not arbitrary. It makes an appeal to something normal in human nature, and it is consequently enjoyed by

a large number of people and helps to form their taste. It is always tending to express those comparatively permanent aesthetic values which are usually associated with the word classic. In particular buildings either this impersonal or this personal element may predominate, and the building may tend to be either eccentric or lifeless, but on the whole the better American work of the last twenty-five years has held a fair balance between French architectural classicism and English architectural romanticism.

A balance of this kind is very excellently embodied in the work of Messrs. Parker, Thomas & Rice. The two original members of this firm both received their training at the Beaux des Arts, and when they returned to this country to begin practice they were naturally predisposed to apply French methods and ideas to their work. In the beginning their application of the results of their French training had a tendency to be literal. At its worst the French influence degenerates into a mere Parisian mannerism which assumes the form not merely of reproducing buildings with a definite Parisian parentage, but of seeking an excess of emphasis both in the general character of the design and in the use of ornament. Messrs. Parker & Thomas never went to any such extreme, but in some of their early buildings, before they had come to do their own architectural thinking, the influence of their Parisian training was a little too much in evidence. But this phase did not last very long, and even while it lasted it did not dominate all their work. Almost from the start they were sensible of the desirability of getting rid of the French manner and of giving expression to the sound technical methods which constituted the substance and value of the Beaux Arts training.

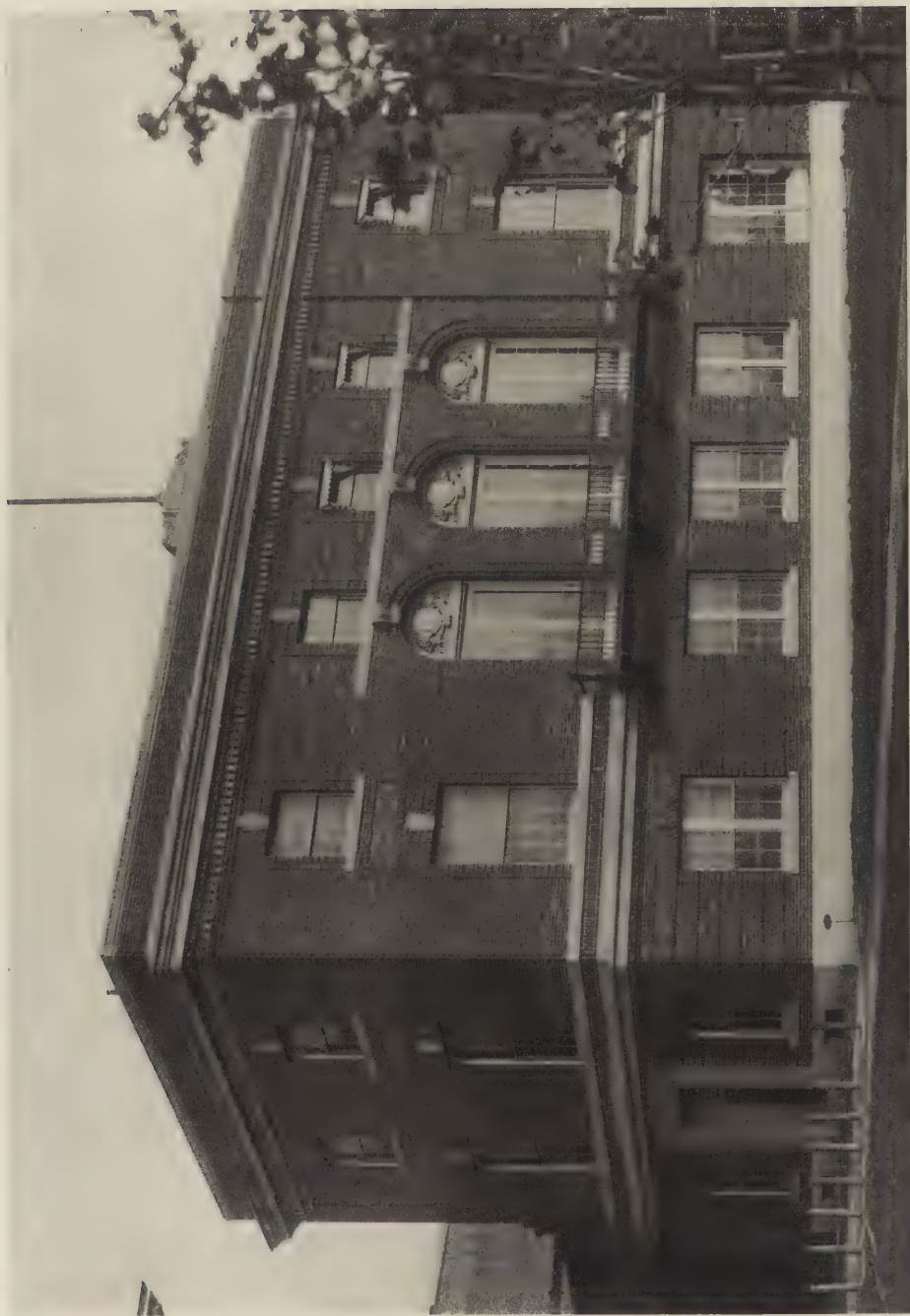
It is significant that Messrs. Parker & Thomas became re-domesticated after their sojourn in Paris very much more quickly than did certain of their contemporaries at the school, and it seems natural to attribute the quickness of this recovery, in part at least, to the fact that unlike most of their contemporaries



THE GLOUCESTER APARTMENTS,
BOSTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



DETAIL—THE GLOUCESTER APARTMENTS,
BOSTON,
MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



THE UNION BOAT CLUB, BOSTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



BUILDING FOR R. H. STEARNS & CO.
BOSTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



DETAIL—BUILDING FOR R. H. STEARNS
& CO. BOSTON. MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



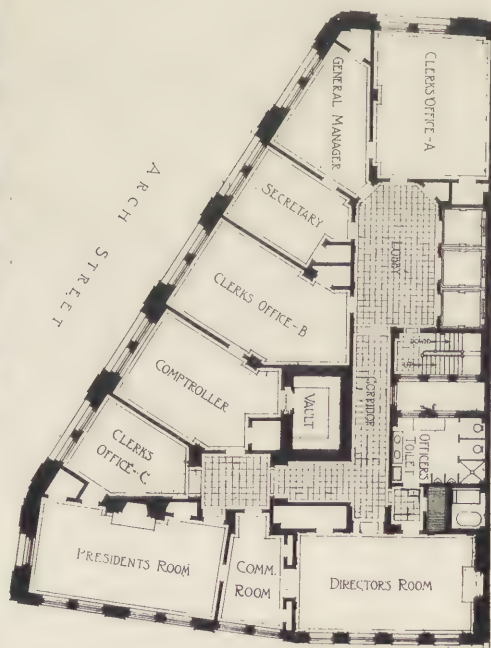
THE COLUMBIAN NATIONAL LIFE INSURANCE
BUILDING, BOSTON, MASS.
Parker, Thomas & Rice, Architects.

they did not begin to practice in New York. Offices were opened both in Boston and Baltimore, cities in which what we have called the English tradition had remained dormant. From the beginning the work of the firm has exhibited the more personal and less *doctrinaire* tendencies, which we have associated with American architectural Anglicanism, and this in spite of the fact that they have not

been betrayed into the technical carelessness which was the worst characteristic of that tradition. The buildings which they have erected in Boston and its vicinity and in Baltimore do not strike the observer with any sense of incongruity. They have not violated the local tradition. What they have done was to improve upon its better characteristics.

One has only to compare the work of Messrs. Parker, Thomas & Rice in the mass with the work of certain prominent New York firms in order to detect the effect of this Anglicized American tradition. There can be no doubt, for instance, that the dominating influence in the work of Messrs. McKim, Mead & White was on the whole rather Italian than anything else. To be sure they designed many buildings, whose source and merits were more French and English than Italian, but it is no less sure that their great contribution to American architecture was the infusion of real life into the Italian Renaissance tradition, with its back-

FRANKLIN STREET



PLAN OF FOURTH FLOOR, COLUMBIAN NATIONAL LIFE INSURANCE BUILDING, BOSTON, MASS.

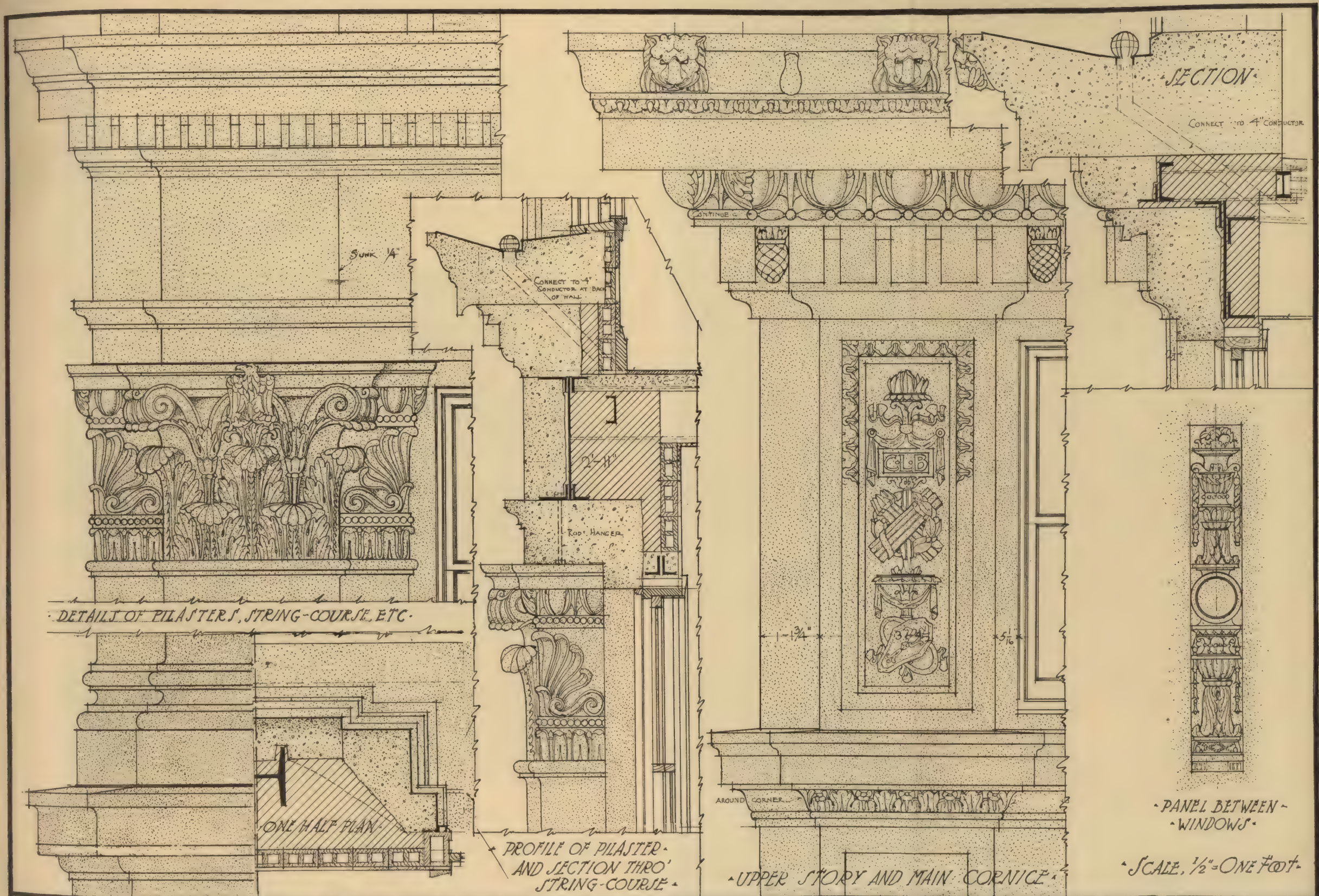
Parker, Thomas & Rice, Architects.



ENTRANCE DETAIL—THE COLUMBIAN NATIONAL
LIFE INSURANCE BUILDING, BOSTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



THE COLUMBIAN NATIONAL LIFE INSUR-
ANCE BUILDING, BOSTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



Back of
Foldout
Not Imaged



THE NORTH GERMAN LLOYD STEAMSHIP
OFFICES, BALTIMORE, MD.
PARKER, THOMAS & RICE, ARCHITECTS.



DETAIL OF THE NORTH GERMAN LLOYD
STEAMSHIP OFFICES, BALTIMORE, MD.
Parker, Thomas & Rice, Architects.

ground in the architecture of Imperial Rome. In the same way the particular contribution which Messrs. Carrere & Hastings have made has been to interpret with fidelity and feeling for the benefit of contemporary America the last really fine period of French architecture, viz.: that of the latter part of the eighteenth century. In the case of Parker, Thomas & Rice, there has been no similar devotion to any one particular phase of past architectural history. They have been more eclectic than either of the two other firms mentioned, and this eclecticism was in itself one illustration of their adhesion to the Anglican American tradition. Their work has, consequently, lacked the consistency which can be obtained only from a somewhat dogmatic limitation of that area of architectural experimentation, a consistency that is even better exemplified in the work of Cram, Goodhue & Ferguson and Charles A. Platt, than it is in that of McKim, Mead & White or Carrere & Hastings. But while the work of Messrs. Parker, Thomas & Rice has not obtained the integrity which comes from loyalty to a particular idea, its eclecticism is as far as possible from being meaningless and indiscriminate. They have adhered for the most part to the tradition of the English Renaissance, and they have showed a lively feeling for the characteristic values of that aspect of the general Renaissance movement. Their work is very personal, as all work which adheres in general to the English tradition must necessarily be, but it is not in the least eccentric. On the contrary, the personal note is human and social rather than specifically individual. It may be compared to the manners of a man who can be warm and sympathetic to his acquaintances without ceasing to be well-bred.

This brings us to the most conspicuous characteristic of the work of Parker, Thomas & Rice, viz.: its persistent good taste. No matter what they are designing, whether it be a warehouse, a hotel or office building, a club house, a city residence, a country place or a bank, they always succeed in giving their buildings a positively agreeable and presentable



THE NORTH GERMAN LLOYD STEAMSHIP
OFFICES, BALTIMORE, MD.
PARKER, THOMAS & RICE, ARCHITECTS.



THE NORTH GERMAN LLOYD STEAMSHIP
OFFICES,
BALTIMORE, MD.
PARKER, THOMAS & RICE, ARCHITECTS.

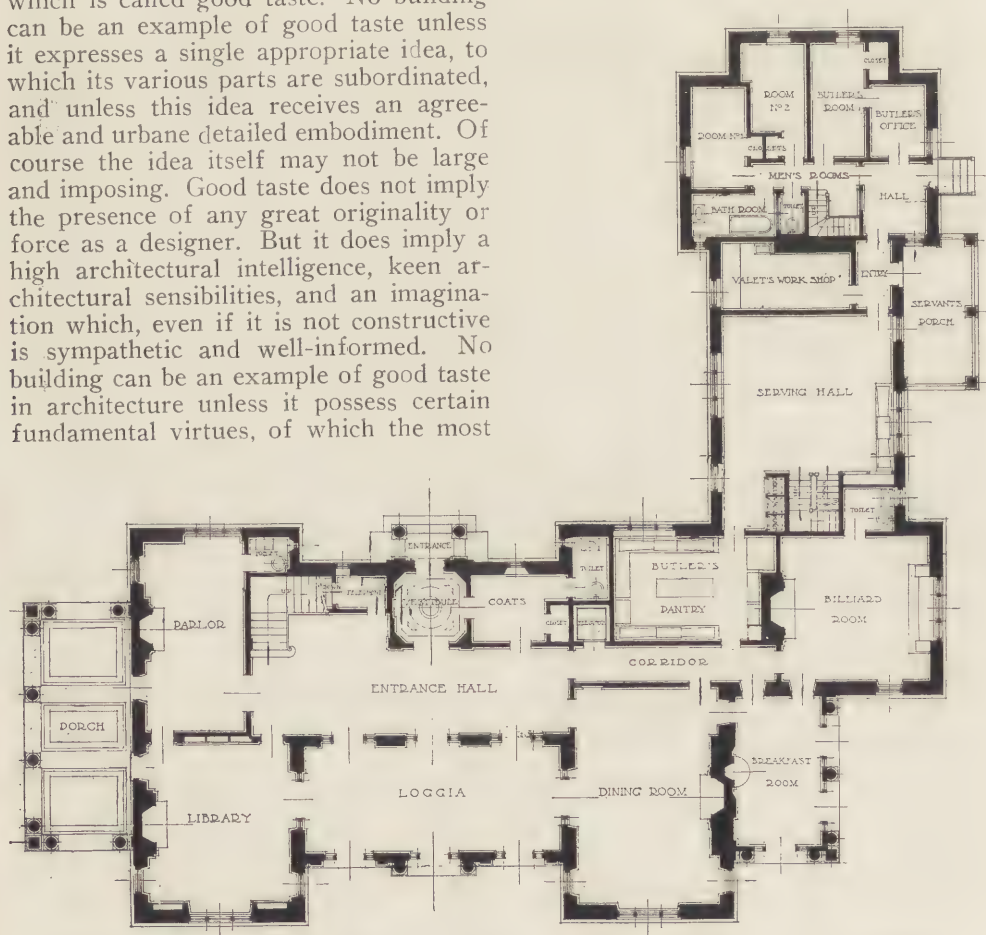


RESIDENCE OF MRS. L. Z. LEITER,
BEVERLY FARMS,
MASS.
PARKER, THOMAS & RICE, ARCHITECTS.

appearance. Neither is their success in this respect to be appraised merely as the expression of a negative quality—the quality of being able to avoid offensive mistakes. Good taste means primarily nothing much more than the ability to know how the normal human eye will regard our individual aesthetic preferences, but in the case of an architect, who has to pull together the appearance of an elaborate and complicated building, it is a positive quality of the highest value. It would not be hard to name three or four very brilliant designers whose work, in spite of its cleverness, in spite occasionally of the presence of bold imaginative architectural ideas, is vitiated by an utter lack of the quality which is called good taste. No building can be an example of good taste unless it expresses a single appropriate idea, to which its various parts are subordinated, and unless this idea receives an agreeable and urbane detailed embodiment. Of course the idea itself may not be large and imposing. Good taste does not imply the presence of any great originality or force as a designer. But it does imply a high architectural intelligence, keen architectural sensibilities, and an imagination which, even if it is not constructive is sympathetic and well-informed. No building can be an example of good taste in architecture unless it possess certain fundamental virtues, of which the most

fundamental is scale. Any disproportion between the parts and the whole, any excessive emphasis of one element in the design, any inability to grasp all the essential elements in the problem are sure to deprive a building of that appearance of being agreeable, which has been attributed to the quality of good taste. It is not the highest quality which an architect can possess, but it is closely related to that quality, and its expression is peculiarly necessary in contemporary American architecture, because it always makes a quick and effective appeal to a large and influential public.

Good taste is rather a gift than an acquisition, but if it were possible to acquire it its acquisition would certainly



FIRST FLOOR PLAN, RESIDENCE OF MRS. L. Z. LEITER, BEVERLY FARMS, MASS.
Parker, Thomas & Rice, Architects.

be promoted by a combination of the two influences to which we have been attributing certain general characteristics of the work of Messrs. Parker, Thomas & Rice—the influence, that is, of both the French and the English tradition. Modern French architecture has been on the whole distinctly lacking in good taste, because its besetting sin has been overemphasis, both in the scale of the design and in the use of ornament. Neither has the English architectural tradition of itself proved to be a favorable sort for the development of good taste. It has tended either to mere personal eccentricity on the one hand or on the other to a conscious reticence and unpretentiousness which was lacking in that candid self-assertion so necessary to high achievement in any of the arts. These architectural tendencies tend to fail in the saving grace of good taste for opposite reasons, but if you could bring about a combination of the two, a fairly satisfactory formula for the formation of good

taste would result. Add the candid intelligence, the scrupulous technique and the vigorous self-assertiveness of French architecture to the greater warmth of personal feeling and the completer flexibility of English architecture, and the outcome of the mixture, whatever its other merits would assuredly be a consummate example of good taste. We know of no better way of characterizing the general and salient quality of the work of Parker, Thomas & Rice than to attribute to it that particular merit and to trace its origin to their success in grafting the results of their French training on the stock of the local architectural tradition of New England.

Reference has been made to the presence in the work of this firm of an eclectic tendency, but it is only fair to add that their eclecticism is almost the inevitable result of the volume and variety of the edifices which they have been commissioned to design. Those American architects who have most carefully es-



END ELEVATION, RESIDENCE OF MRS. L. Z. LEITER, BEVERLY FARMS, MASS.
Parker, Thomas & Rice, Architects.



DETAIL OF GARDENER'S COTTAGE, ESTATE OF
L. Z. LEITER, ESQ., BEVERLY FARMS, MASS.



GARDENER'S COTTAGE, STABLE AND GARAGE,
ESTATE OF L. Z. LEITER, ESQ., BEVERLY FARMS,
MASS.



THE MARYLAND CASUALTY COMPANY BUILDING, BALTIMORE, MD.
Parker, Thomas & Rice, Architects.

chewed experimental diversity of style have usually been specialists in one or at least in a few particular classes of building, in which case it is comparatively easy to bestow upon their work genuine consistency of form. But in the case of Parker, Thomas & Rice the maintenance of any such consistency was a far more difficult job. There have, of course, been other architectural firms the volume of whose work has been larger, but it is safe to say that there is none whose work has been more varied. They have had the rare opportunities of designing a group of exposition buildings and of having been unusually successful making the group both dignified and festive. They are now the official architects for one of the most prominent American universities, which has equipped itself with an outfit of new buildings, and as every one knows, a commission of this kind is exceedingly unusual and has been denied

to many of the most successful American architects. During the past ten years they have designed a larger number of low formal banking offices than any other firm in the country. The plans of many of the most important office buildings both in Boston and Baltimore have been turned out from their office, while in addition they have built almost as many warehouses. They have also designed one large hotel, several apartment houses, two important and successful clubs, quite a number of schools, and many miscellaneous buildings. Finally, they have been unusually successful both in obtaining commissions for the design of city and country houses and in executing these commissions to the satisfaction of their clients. Thus there is not a single type of building, except that of a monumental public edifice with the problem of which Messrs. Parker, Thomas & Rice have not had a chance to deal,

and such a wide diversity of practical requirements was bound to result in the selection of many different types of design, some of which would have to be experimental. The wonder is under the circumstances, not that the work of the firm has tended toward eclecticism, but that it has retained such a large amount of consistency.

The characteristics which the work of the firm has since brought to light were distinctly foreshadowed in one of the first important buildings designed by them—the Hotel Belvedere in Baltimore. In the exterior of this hotel there is clearly to be observed the results of a careful French training modified by instinctive good taste. Its façade attracted attention at once, because of the peculiarly successful adaptation which it exhibited, of a French domestic model to the needs of a towering American hotel. The same model had been used by other architects, but never, we believe, either before or since with so much success. Indeed the Hotel Belvedere is one of the few instances in which an architect has succeeded in giving scale to a twelve-story hotel. The vertical division of the design, the variations of the materials, and the treatment of the ornament on and above the cornice line have all been excellently managed, and the result is a building which makes both a strong and a pleasing impression on the beholder. A hotel is, after all, a domestic building, and like other domestic buildings it should present an inviting appearance to the public. It should even more than other domestic buildings tempt the guest to enter. Not very many modern American hotels have succeeded in creating this impression, the value of which, it may be remarked, is now receiving the testimony of the management of the Ritz-Carlton hotels. But in the Hotel Belvedere this very impression was produced with eminent success; and if the success was not complete that was only because a pair of architects so recently returned from Paris could not immediately overcome a tendency to an excess of emphasis in their handling of the ornamental detail.

The interior of the hotel showed much the same characteristics as the exterior.



THE MINOT BUILDING, BOSTON, MASS.
Parker, Thomas & Rice, Architects.

It was much more soberly treated than the majority of large American hotels, and it contained nothing which was offensive to a fastidious taste. In the de-



THE HOTEL BELVEDERE, BALTIMORE, MD.
PARKER, THOMAS & RICE, ARCHITECTS.



ENTRANCE DETAIL—THE HOTEL BELVEDERE,
BALTIMORE, MD.
PARKER, THOMAS & RICE, ARCHITECTS.



THE HOTEL BELVEDERE, BALTIMORE, MD.
PARKER, THOMAS & RICE, ARCHITECTS.



THE BALL ROOM, HOTEL BELVEDERE,
BALTIMORE, MD.
PARKER, THOMAS & RICE, ARCHITECTS.



THE TAP ROOM—HOTEL BELVEDERE,
BALTIMORE. MD.
PARKER, THOMAS & RICE, ARCHITECTS.



THE BALTIMORE AND OHIO OFFICE BUILDING, BALTIMORE, MD.
PARKER, THOMAS & RICE, ARCHITECTS.



EXPOSITION BUILDINGS, JAMESTOWN, VA., 1907.
Parker, Thomas & Rice, Architects.

sign of the ballroom, just as in the design of the exterior, a tendency was exhibited towards the over-ornamentation characteristic of French methods and towards the literal reproduction of French models; but on the other hand, some of the interior also gave a hint of the tasteful originality, which has since been characteristic of their domestic work. The Hotel Belvedere contained one of the earliest and most successful lattice rooms ever built in this country, while the cafe, which has since been added, is an admir-

able example of the use of ornamental brick for an apartment of this kind.

One has only to compare the facade of the Hotel Belvedere with that of correspondingly tall office buildings, which Parker, Thomas & Rice have more recently erected in Boston, in order to understand how quickly and completely the firm got rid of the French manner, merely as a manner. These latter buildings have nothing specifically French about them, unless it be French to be designed with simplicity, propriety and good taste.



EXPOSITION BUILDING, JAMESTOWN, VA., 1907.
Parker, Thomas & Rice, Architects.



SWIMMING POOL IN THE BALTIMORE ATHLETIC CLUB, BALTIMORE, MD.
Parker, Thomas & Rice, Architects.

The store of R. H. Stearns & Co., for instance, is scrupulously simple in its general appearance, and both economical in the amount of its ornamentation, and reticent in its effect. In this instance one detects the possible influence of a desire on the part of the owner of the store to be solid and unpretentious but none the less smart—like a good old Boston family. The balance is better maintained in some of the office-buildings. Take, for instance, the Minot Building, which might well be used as a typical example of the preservation of the appropriate balance in a structure of this character between substantiality, simplicity and display. It has distinction without affectation and it is business-like without being dull. The design of the Columbia National Life Building has much the same qualities. The architects of office buildings situated in Boston have presented to them a number of interesting and unusual problems.

The older parts of the city are composed of a number of narrow irregular streets, and the lots, into which the property is divided are similarly irregular in their dimensions. These lots offer opportunities for ingenious plans, and sometimes for buildings which are seen from many converging angles. Thus the lot on which the Columbian Life Building is situated falls on three streets, and its four sides are of widely varying lengths. The architects, by concentrating all the elevators and other services on one side of the building, and by distributing all the offices on the three sides, which face the streets, have secured the maximum amount of well lighted rentable space with a minimum amount of waste. The design of the edifice has the same qualities as has that of the Minot Building. The limitations imposed upon the height allow the architect to establish a pleasing relation between the vertical and the



THE COMMONWEALTH TRUST COMPANY BUILDING, BOSTON, MASS.
Parker, Thomas and Rice, Architects.

horizontal members of the façade, and such a relation has been successfully achieved in the Columbia Life Building. It is simple, dignified and serviceable, while it has at the same time that touch of distinction which is always characteristic of the work of a gifted designer.

As an example of the cleverness and sympathy with which Messrs. Parker, Thomas & Rice can handle a style which is wholly alien to the forms which they habitually use, the attention of the reader is particularly called to the offices of the North German Lloyd in Baltimore. The company wanted its offices to express the fact that it was running steamers to Germany, and insisted, consequently, upon the use of the picturesque German urban models, the exterior analogue of a Rathskeller. Their architects have filled the demand with conspicuous suc-

cess. This Germanized building is quite the most sympathetic, tasteful and entertaining experiment in this exotic style with which we are familiar, and it proves as we have already intimated that the best quality in the work of this firm is derived from a very genuine and a very versatile gift for design. It has been scarcely less successful with the law office building of the Pennsylvania Railroad Company in the same city, which is an admirable adaptation of Georgian forms to the problem of a modern business structure. The façade of this office does not look in the least like a residence, as the façade of the North German Lloyd Building necessarily did, nevertheless the architects have managed to retain in this business-like structure the same suggestion of good architectural manners which must be characteristic of any



OFFICES OF THE PENNSYLVANIA RAILROAD, BALTIMORE, MD.
PARKER, THOMAS & RICE, ARCHITECTS.



DETAIL, RESIDENCE OF WALTER C. BAYLIES,
ESQ., BOSTON, MASS.

Parker, Thomas & Rice, Architects.

building of Georgian parentage. In the cases of the two warehouses, the façades have been stripped of everything which would take away from the severely economical and business-like aspect of the structure, and yet by virtue of a skillful and tasteful handling of the brick work the effect is positively pleasing. Such is particularly the case with the

warehouse of the Patapsco Flouring Mills in Baltimore.

Probably, however, Messrs. Parker, Thomas & Rice, like the great majority of American architects have done their most successful and distinguished work in the field of domestic building. Their best qualities, their sympathy, versatility, good taste, and instinctive sense of propriety naturally find their happiest means of expression in the designing of residences. Americans are more interested in their houses than in their office or public buildings, and the English tradition, from which American architecture has only superficially broken away, was, of course, embodied most successfully in noble and beautiful country places. It is something of this kind on a smaller scale which Americans have wanted most of all to reproduce and which they have measurably succeeded in reproducing. The scale of the reproduction has varied in different parts of the country; but in no section has it been confined within more appropriate bounds than in New England.

In the cases of the urban houses of Messrs. Parker, Thomas & Rice interest will naturally centre on the interiors, because a large part of it has consisted of alterations, and it is certain that few American architectural firms have been more successful in giving distinction and style to this aspect of their work. Their taste in arrangement and in detail is very rarely caught napping, and their rooms always have the English characteristic of being livable, without the frequently accompanying English characteristic of being fussy. The Pompeian alcove, leading off the ball-room in the house of Walter C. Baylies is an excellent illustration of their ability to handle architectural incidents of this kind idiomatically and pleasantly. The ball-room in the same house is one of their earlier interiors, and shows the effect of their French training. One has only to compare it with the similar room in the house of George M. Nowell in order to appreciate how much more simple their work had become during the intervening years. The comparison between the detail in these two rooms is extremely il-



DETAIL, RESIDENCE OF WALTER C. BAYLIES, ESQ., BOSTON, MASS.
Parker, Thomas & Rice, Architects.



DETAIL, RESIDENCE OF GEORGE M. NOWELL, ESQ., BOSTON, MASS.
Parker, Thomas & Rice, Architects.



DETAIL, RESIDENCE OF GEORGE M.
NOWELL, ESQ., BOSTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.

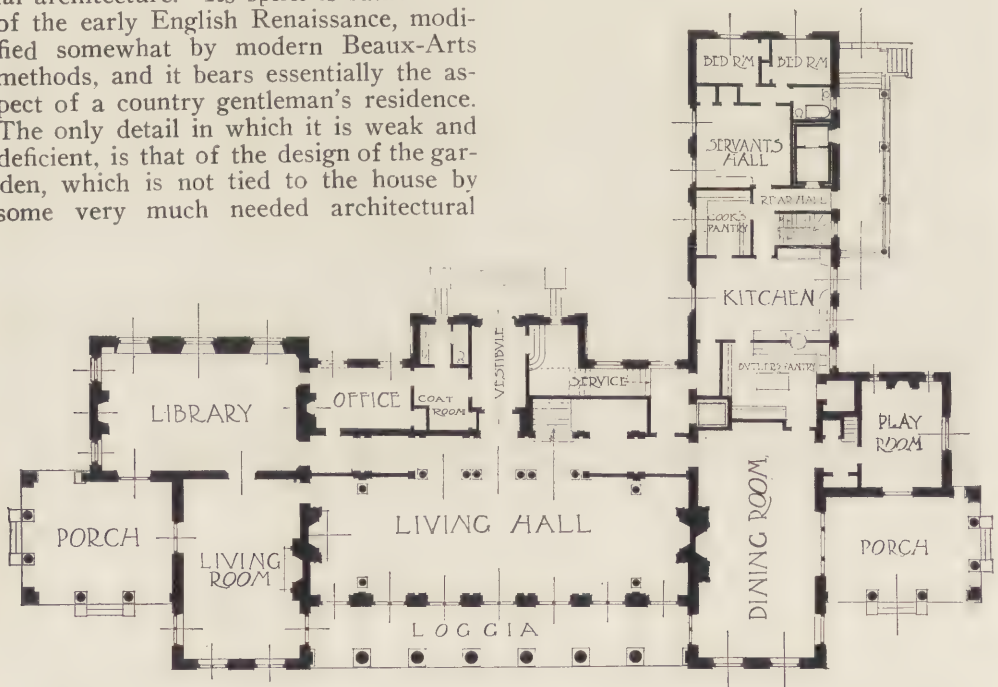


DETAIL OF MUSIC ROOM, RESIDENCE OF
GEORGE M. NOWELL, ESQ., BOSTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.

luminating and illustrates excellently the way in which an historic style may be advantageously purified for modern American use. The entrance hall in the Nowell house is also a model of its kind, and the same statement is equally true of the dining room in Mr. Parker's own house on Marlboro street. The latter is an unusually successful example of a white panelled interior and its scrupulous simplicity may be profitably compared with the more elaborate Adam dining-room in the Leiter house at Beverly Farms.

One of the most elaborate and successful country houses designed by Parker, Thomas & Rice is that of F. Lothrop Ames, Esq., at North Easton, Mass. The façade of this building, consisting as it does of two gabled wings connected by an enclosed colonnade is boldly conceived. It is, perhaps, somewhat over-emphatic in its effect, and needs, if anything, a little toning down; but it is an excellently simple and strong composition, and it gets away entirely from the mere self-conscious diffidence, characteristic of colonial architecture. Its spirit is rather that of the early English Renaissance, modified somewhat by modern Beaux-Arts methods, and it bears essentially the aspect of a country gentleman's residence. The only detail in which it is weak and deficient, is that of the design of the garden, which is not tied to the house by some very much needed architectural

members. Another elaborate brick house, which is, however, more French than English, is the Leiter House at Beverly Farms. Here again one would like to have the emphasis a little moderated, but the house is none the less an extraordinarily clever and competent piece of work. It looks more like the urban villa of essentially city people rather than like the house of a country gentleman. Peculiarly attractive are the coachman's cottage and garage on the Leiter place. This firm is never more happy than in handling a picturesque building or group of buildings such as this, because they bring to these less serious problems a natural instinct for architectural picturesqueness which is helped rather than hindered by the habits of trained designers. The residence in which the English tendency usually characteristic of Parker, Thomas & Rice is most completely submerged by the French influence, is that of Mr. Frederick Ayer at Prides Crossing, which is simply a smart modern French country house. Its most interesting feature consists of a monumental staircase.



FIRST FLOOR PLAN, RESIDENCE OF F. LOTHROP AMES, ESQ., NORTH EASTON, MASS.
Parker, Thomas & Rice, Architects.



RESIDENCE OF F. LOTHROP AMES, ESQ., NORTH EASTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



RESIDENCE OF F. LOTHROP AMES, ESQ., NORTH EASTON, MASS.
PARKER, THOMAS & RICE,
ARCHITECTS.



DETAIL, RESIDENCE OF F. LOTHROP
AMES, ESQ., NORTH EASTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



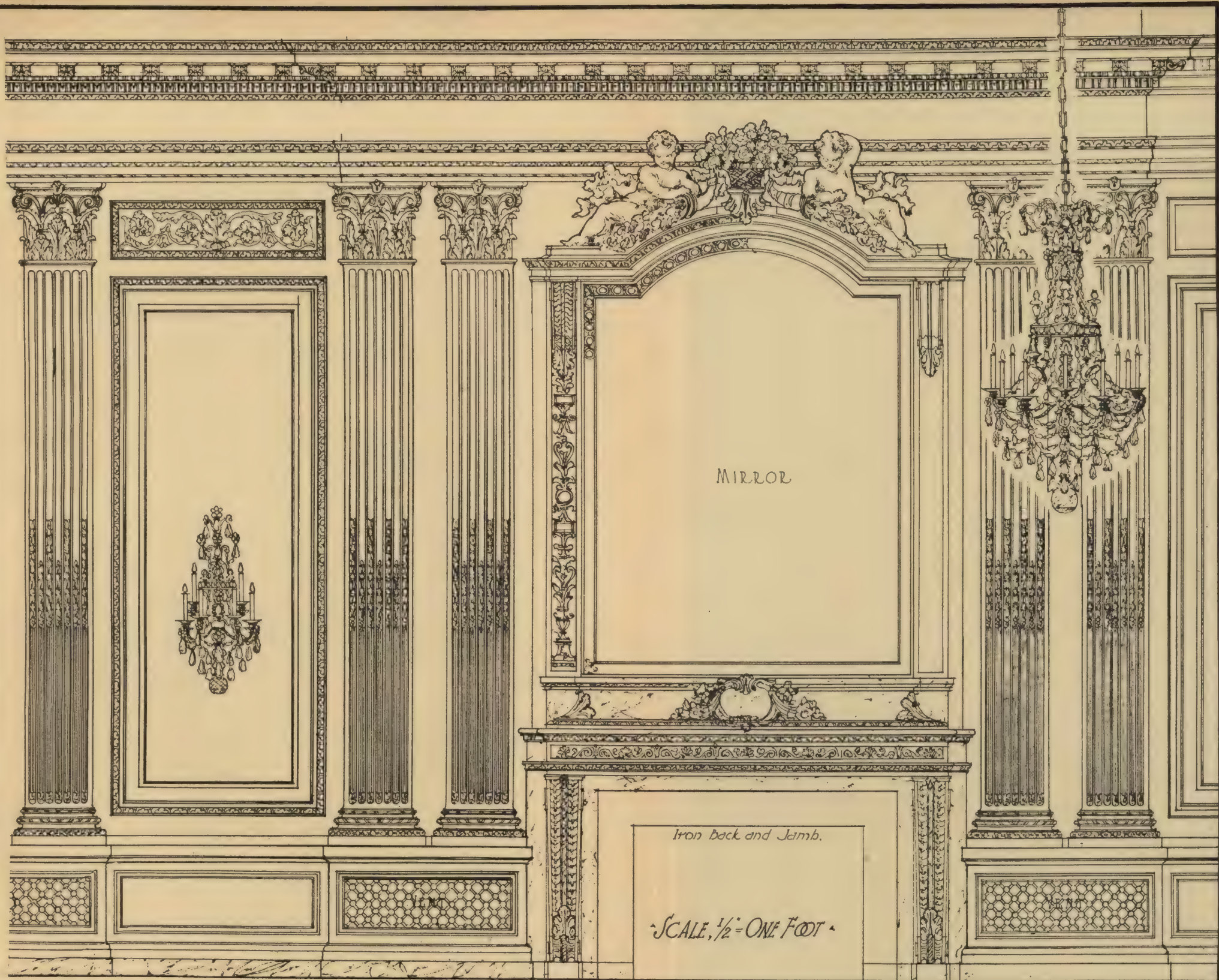
END ELEVATION, RESIDENCE OF F. LOTHROP
AMES, ESQ., NORTH EASTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



DETAIL, RESIDENCE OF F. LOTHROP
AMES, ESQ., NORTH EASTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



DETAIL OF BALLROOM, RESIDENCE OF
WALTER C. BAYLIES, ESQ., BOSTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.

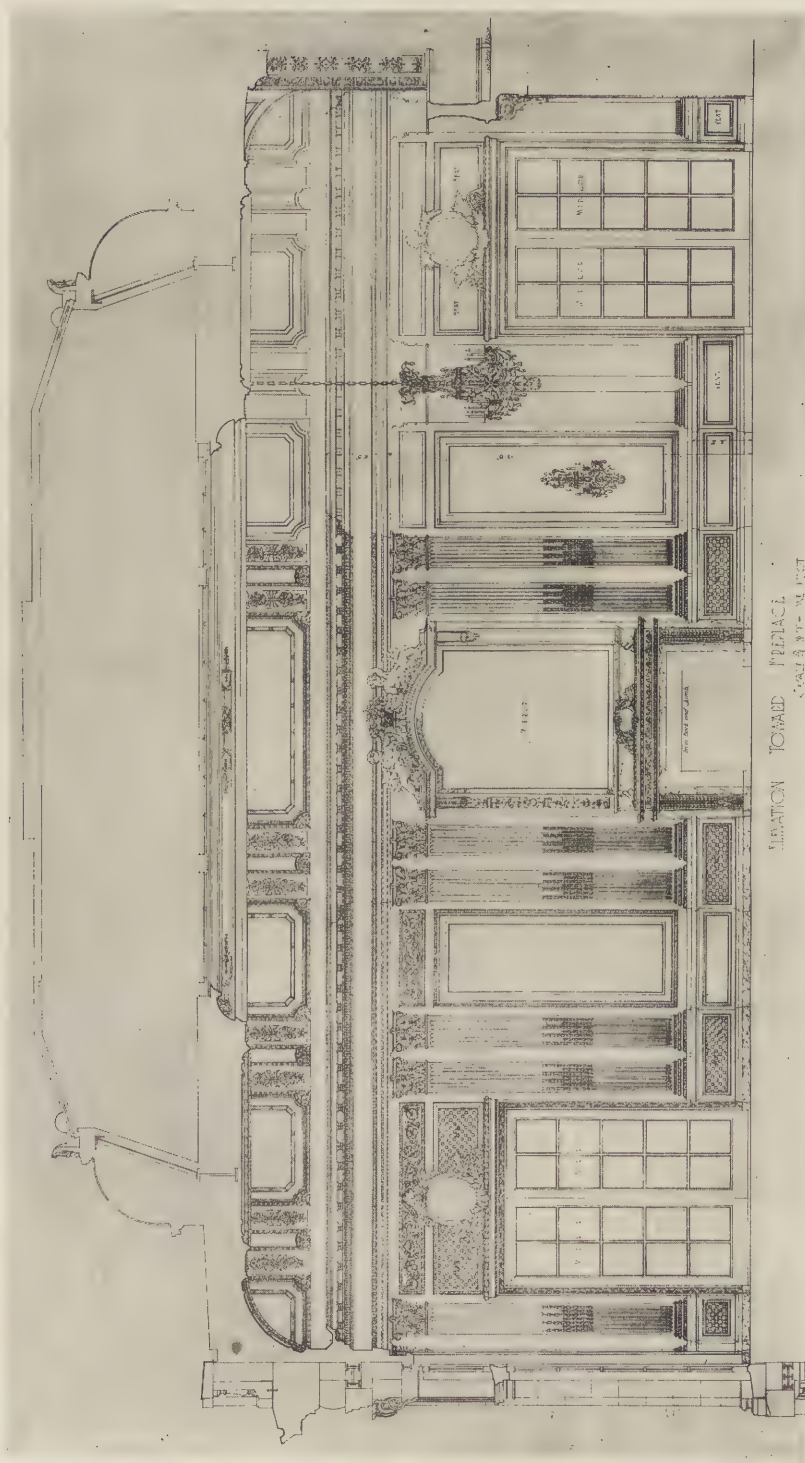


MIRROR

Iron back and Jamb.

SCALE, $\frac{1}{2}$ " = ONE FOOT

Back of
Foldout
Not Imaged



ELEVATION TOWARD TERRACE
 SCALE 1/8" = 1'-0"

ELEVATION OF BALLROOM, RESIDENCE OF
 WALTER C. BAYLIES, ESQ., BOSTON, MASS.
 PARKER, THOMAS & RICE, ARCHITECTS.



THE BALLROOM, RESIDENCE OF WALTER C. BAYLIES, ESQ.,
BOSTON, MASS. PARKER, THOMAS & RICE, ARCHITECTS.



DETAIL FROM BALLROOM, RESIDENCE OF
WALTER C. BAYLIES, ESQ., BOSTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



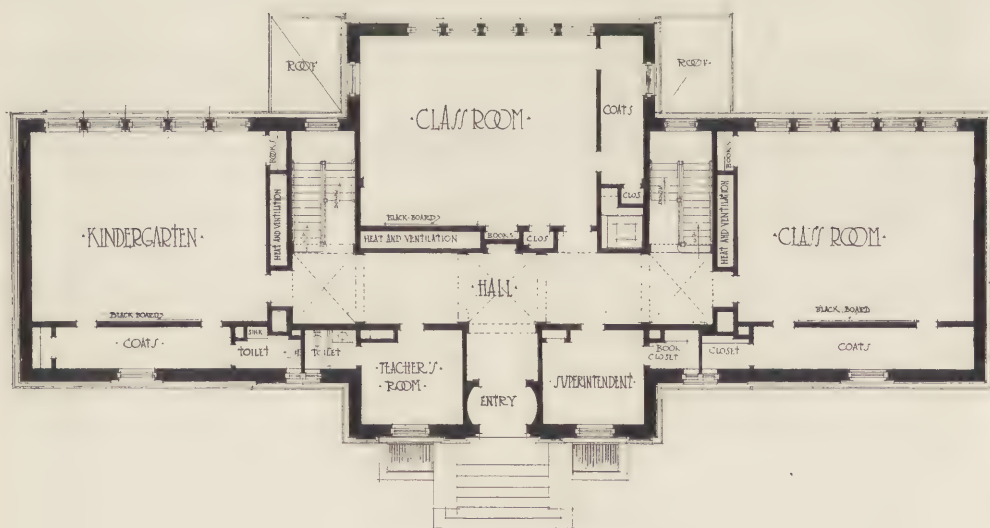
RESIDENCE OF WALTER C. BAYLIES, ESQ., BOSTON, MASS.
PARKER, THOMAS & RICE,
ARCHITECTS.



ENTRANCE DETAIL, RESIDENCE OF
WALTER C. BAYLIES, ESQ., BOSTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



PUBLIC SCHOOL BUILDING, LINCOLN, MASS.
Parker, Thomas & Rice, Architects.



FIRST FLOOR PLAN OF PUBLIC SCHOOL BUILDING, LINCOLN, MASS.
Parker, Thomas & Rice, Architects.



UNITED STATES POST OFFICE AND
COURT HOUSE, MARBLEHEAD, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



COUNTRY SCHOOL FOR BOYS, BALTIMORE, MD.
PARKER, THOMAS & RICE, ARCHITECTS.



ENTRANCE DETAIL, COUNTRY SCHOOL FOR BOYS, BALTI-
MORE, MD. PARKER, THOMAS & RICE, ARCHITECTS.



RESIDENCE OF JAMES JACKSON, ESQ., DEDHAM, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



RESIDENCE OF W. D. SAWYER, ESQ., MILWAUKEE, WIS.
PARKER, THOMAS & RICE,
ARCHITECTS.



RESIDENCE OF COL. C. L. F. ROBINSON, HARTFORD, CONN.
Parker, Thomas & Rice, Architects.



RESIDENCE OF COL. C. L. F. ROBINSON, HARTFORD, CONN.
Parker, Thomas & Rice, Architects.



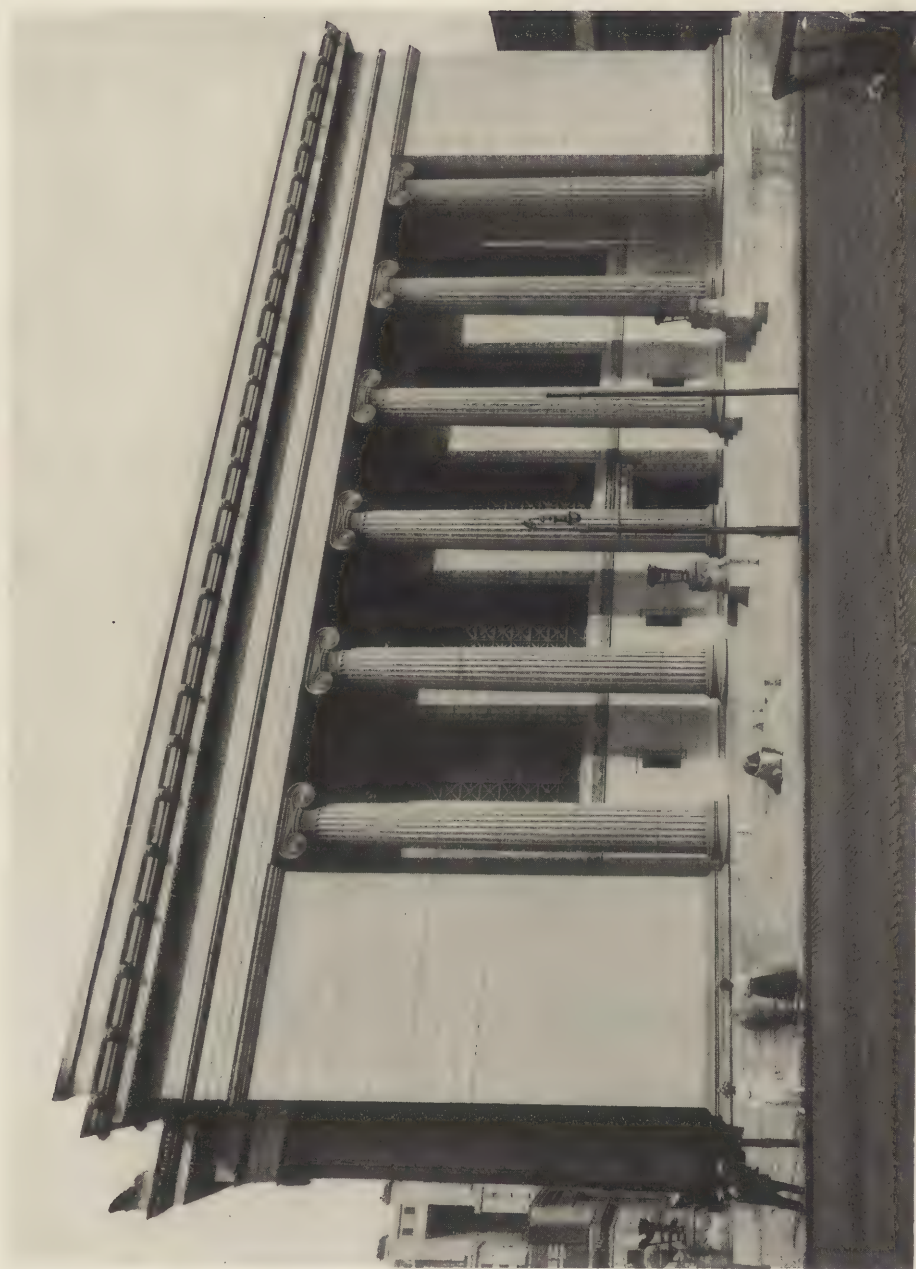
THE BALTIMORE TRUST COMPANY, BALTIMORE, MD.
PARKER, THOMAS & RICE, ARCHITECTS.



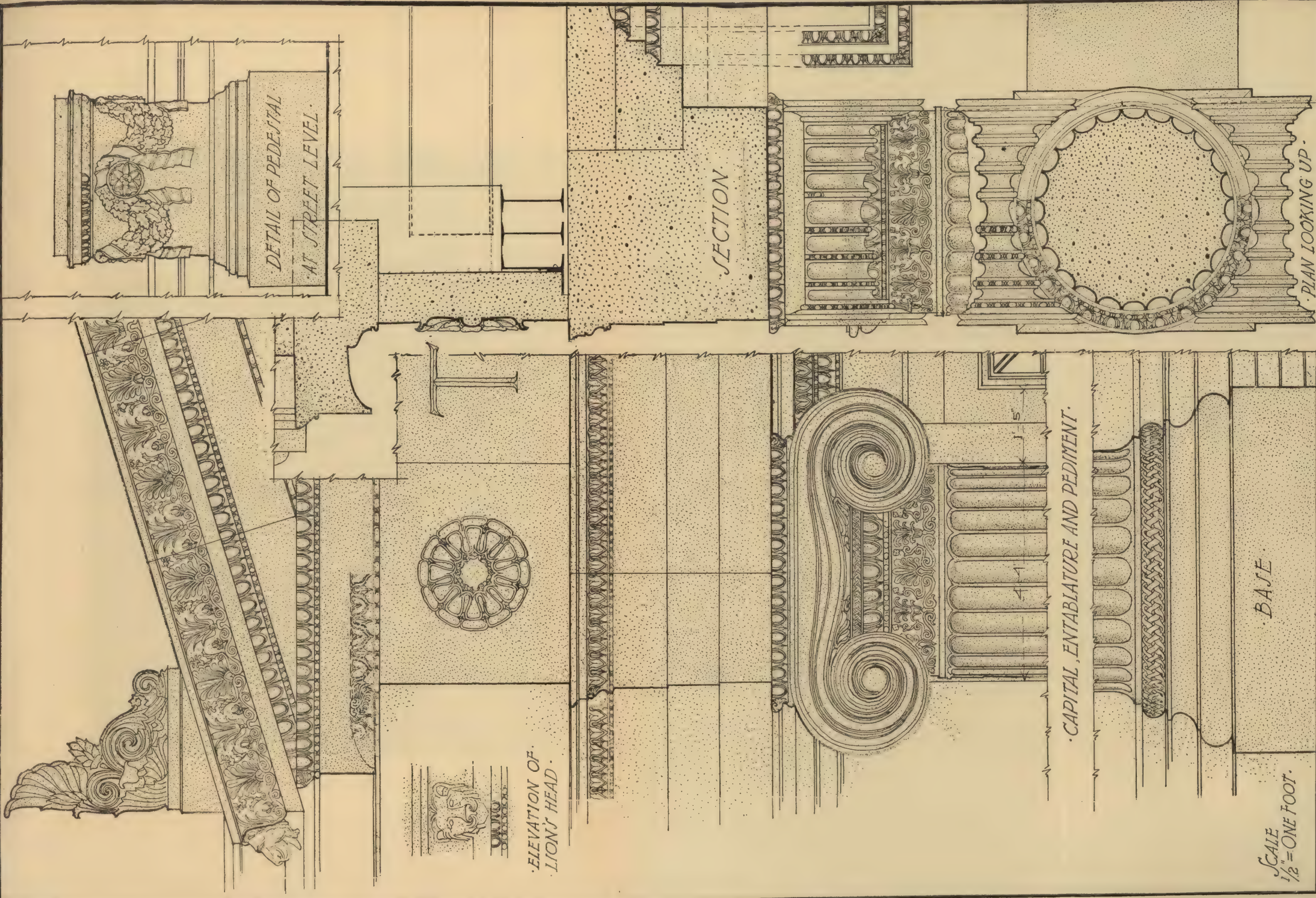
METROPOLITAN SAVINGS BANK, BALTIMORE, MD.
PARKER, THOMAS & RICE,
ARCHITECTS.



METROPOLITAN SAVINGS BANK, BALTIMORE, MD.
PARKER, THOMAS & RICE,
ARCHITECTS.



SAVINGS BANK OF BALTIMORE, MD.
PARKER, THOMAS AND RICE, ARCHITECTS.



DETAIL OF PEDESTAL
AT STREET LEVEL

SECTION

CAPITAL, ENTABLATURE AND PEDIMENT

BASE

SCALE
1/2" = ONE FOOT

PLAN LOOKING UP

ARCHITECTURAL RECORD
DETAIL PLATE NO. 11
ISSUE OF AUGUST, 1915

DETAILS OF THE SAVINGS BANK OF BALTIMORE

PARKER, THOMAS
AND RICE

Back of
Foldout
Not Imaged



SAVINGS BANK OF BALTIMORE, MD.
PARKER, THOMAS & RICE, ARCHITECTS.



RESIDENCE OF HORATIO HATHAWAY, ESQ., DEDHAM, MASS.
Parker, Thomas & Rice, Architects.

which has been managed in an extremely effective manner.

One of the most complete, attractive and well considered of all Parker, Thomas & Rice's houses is that of Miss Ellen D. Sharpe at Providence, Rhode Island. One would have to go far in order to find a more idiomatic and more intelligent piece of brick work. It has all the discretion characteristic of the better English houses, without any of the mere self-conscious reticence of so many of them. Two smaller houses, one at Dedham, Massachusetts, and the other at Havre de Grace, in Maryland; although their design is more loose, have something the same character. Equally successful in their own way are the two stucco houses, one at Hartford, Connecticut, and the other at Nahant, Massachusetts. One cannot help wishing that Messrs. Parker, Thomas & Rice had made more use of Italian models. Their leaning toward simple and consistent methods of expression would have obtained even more complete satisfaction with the help of Italian precedents than it has done with the combination of French and English influences, which

we have been tracing. Both of these houses are attractive examples of a country villa, which promise well for an attempt to embody something of the Italian breadth of spirit in a larger house.

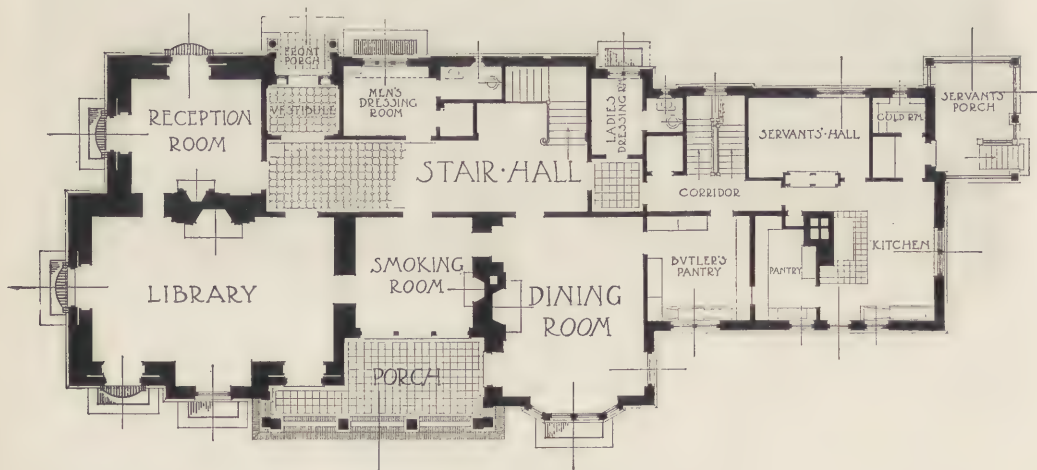
Among the many attractive residences designed by these architects, the one which the writer likes best is the house of Horatio Hathaway, Esq., at Dedham, Massachusetts. It is a stone building, reminiscent of the colonial houses of the same material which were built near Philadelphia, but the model is modified so as to make it approximate in feeling to that of the New England Colonial houses. It is both broadly and finely conceived and it has dignity and repose as well as propriety. Another very interesting performance is the cottage designed for Mr. Walter C. Baylies, at Taunton, Massachusetts. This is a perfectly frank attempt to reproduce a New England Colonial farm house of the better class and it is highly successful. The interiors are particularly quaint, the model having been followed down to the smallest detail. Notice, for instance, the hardware in the bedroom. Of course no farmhouse in New England had a pan-



GARDEN FOR HORATIO HATHAWAY, ESQ., DEDHAM,
MASS. PARKER, THOMAS & RICE, ARCHITECTS.



RESIDENCE OF MISS ELLEN D. SHARPE, PROVIDENCE, R. I.
Parker, Thomas & Rice, Architects.



FIRST FLOOR PLAN.
RESIDENCE OF MISS ELLEN D. SHARPE, PROVIDENCE, R. I.
Parker, Thomas & Rice, Architects.



ENTRANCE DETAIL, RESIDENCE OF MISS
ELLEN D. SHARPE, PROVIDENCE, R. I.
PARKER, THOMAS & RICE, ARCHITECTS.



RESIDENCE OF MISS ELLEN D. SHARPE, PROVIDENCE, R. I.
Parker, Thomas & Rice, Architects.

elled bedroom and a painted frieze, but they might have had, in case New England farmers had happened to have more money to spend.

In the foregoing review of the work of Messrs. Parker, Thomas & Rice, we have omitted all reference to certain of their most successful buildings. The façade of the Tennis and Racquet Club in Boston has long been admitted to be both a brilliant and solid piece of work, but it has attracted so much attention that it did not seem worth while to refer to it in detail. The façade of the new Harvard Club in Boston and the dining-hall in the same building will come in for an equally large amount of appreciation. They have been neglected only because they are not entirely completed. The object of this review has not, however, been that of criticizing individual build-

ings. Its object has been to bring out the dominant influences and motives, which have informed the very diversified work of the firm. It has made an individual and a substantial contribution to contemporary American architecture, and it has pre-eminently deserved its very considerable success.

H. D. C.

A NOTE ON SOME INTERIORS DESIGNED BY PARKER, THOMAS & RICE

It has been remarked in the previous part of this article that among other salient characteristics of the work of Parker, Thomas & Rice, the wide range of their achievement has always shown two prominent qualities—good taste, and (though the expression may seem paradoxical), consistent diversity. In other words, the diverse treatment of the build-



THE HARVARD CLUB OF BOSTON, MASS.
Parker, Thomas & Rice, Architects.



DINING ROOM, RESIDENCE OF MRS. L. Z. LEITER, BEVERLY FARMS, MASS.
Parker, Thomas & Rice, Architects.

ings shown, when not due to the nature of the building itself, may be said to be resultant not from the fact that the designers did not appreciate or value consistency for its own sake, but rather from the fact that each building called for individual consideration. That this consideration was externally governed by slightly changing ideals during the firm's career is not so significant as that in all cases there has been apparent an underlying foundation of good taste, and a refined architectural expression of the problem immediately in hand.

Certainly these conclusions are no less forcibly expressed in the interiors illustrated than in the exteriors, and the illustrations cannot fail to show, individually, diverse interest and a nice conception of detail, and collectively an unusually high general standard of attainment.

Of interiors designed by the firm, certainly those of the ballrooms of the Hotel

Belvedere and in the residence of Walter C. Baylies, Esq., are thoroughly French in thought and execution. In the first, pilaster, cartouche and console, in the Belvedere ballroom are almost militant, and yet for all the exuberance of the style there is noticeable a certain quality of restraint, a nice alignment of parts and none of the blatant mannerism which has gone so far in many cases to prejudice architectural critics against French training.

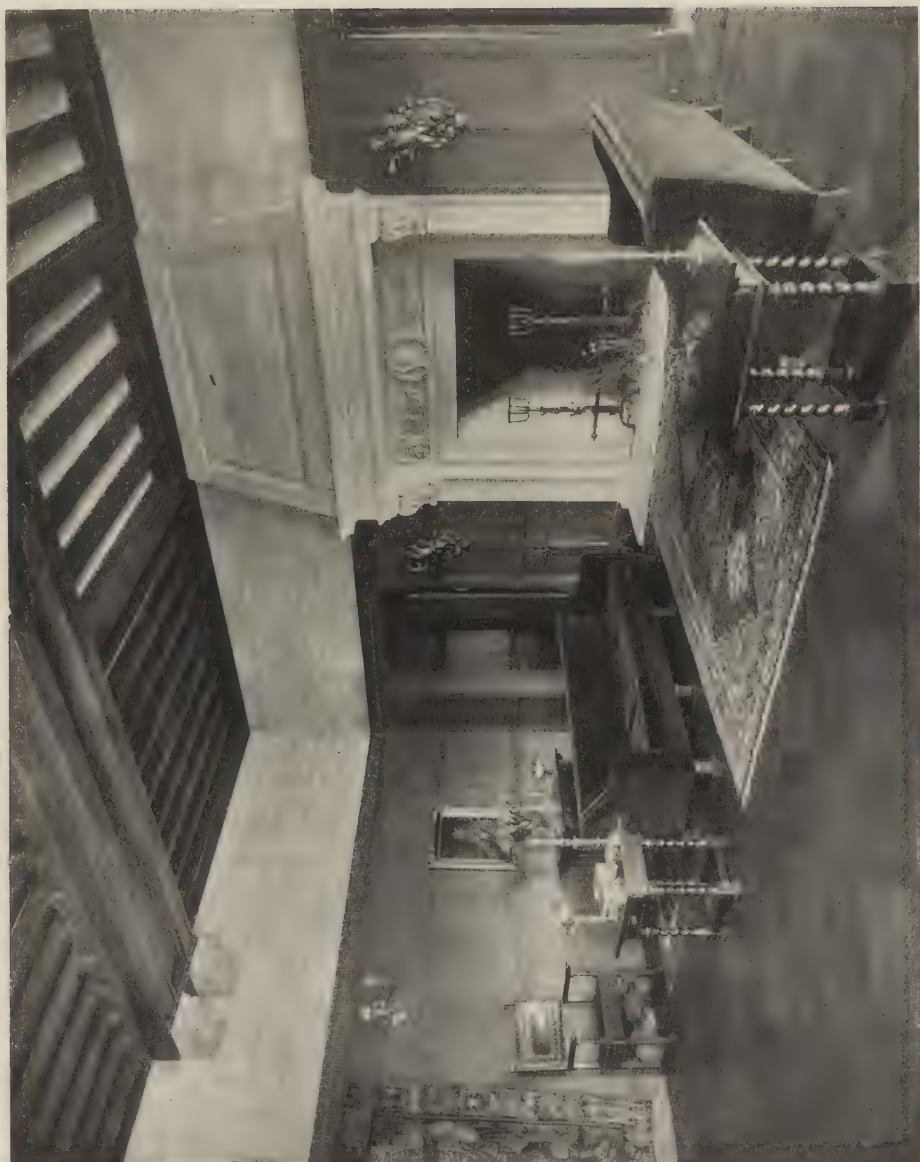
With no less adherence to the characteristics of the French school, the Baylies ballroom is far more refined, and is more reservedly detailed—it is more in character with the urbane architectural manners of the 18th century in France than of the modern voluptuous fantasia, and is, beside, much more in character with the later work of the firm. The transition in this ballroom from the essentially French treatment to the Pom-



ENTRANCE HALL, RESIDENCE OF FRED-
ERICK AYER, ESQ., PRIDES CROSSING, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



RESIDENCE OF FREDERICK AYER, ESQ., PRIDES CROSSING, MASS.
PARKER, THOMAS & RICE,
ARCHITECTS.



RESIDENCE OF FREDERICK AYER, ESQ., PRIDES CROSSING, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



DINING ROOM, RESIDENCE OF GEORGE M. NOWELL, ESQ.
Parker, Thomas & Rice, Architects.

peian *ante-chambre*, with its fountain and statue is an unusually skillful piece of architectural dexterity, and, in the abstract, would seem almost impossible.

In the music-room in the residence of George M. Nowell, Esq., there is still a more scholarly and careful rendition of the best that the 18th century in French architecture has bequeathed to us—an even greater refinement of members and greater nicety of alignment, while the other interiors in this house show a bit more of the stylistic individuality of the architects. The design of the stair-rail is notably characteristic, as well as the careful and quiet detailing in the dining room.

In the Frederick N. Ayer house the almost grandiose atmosphere of the entrance hall entirely belies the well-mannered charm of the great living room, wherein ceiling, wainscoted walls and

monumental fire-place are worked into a whole at once pleasing and dignified.

The same quality is apparent in the President's room in the Columbian National Life Building in Boston, where, as well as in the living room of the William A. Whitcomb house, the architects have infused a happy feeling of the English. The last mentioned room, indeed, seems one of the most attractive interiors shown.

The hallway of the Charles E. Bryan house at Havre de Grace, in Maryland, is a charming study in what might be called "informal Colonial" architecture—the railing suggesting a lightness and grace somewhat to be associated with Chippendale and the whole presenting a quality of *character*, the attainment of which is very easy to miss in a treatment bringing into play so little ornamental detail.

In the two dining-room interiors



HALL, RESIDENCE OF GEORGE M. NOWELL, ESQ., BOSTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



LIVING ROOM, RESIDENCE OF WILLIAM A. WHITCOMB, ESQ., BOSTON, MASS.
Parker, Thomas & Rice, Architects.



DINING ROOM, RESIDENCE OF J. H. PARKER, ESQ., BOSTON, MASS.
Parker, Thomas & Rice, Architects.



DINING ROOM, RESIDENCE OF J. H. PARKER, ESQ., BOSTON, MASS.
PARKER, THOMAS & RICE,
ARCHITECTS.

shown, from Mr. Parker's own house, there is a suggestion that for all his pleasant facility in other styles, he has a slight personal leaning toward the most refined period of French architecture—and it is this feeling, perhaps, subtly infused through all the work of the firm, that contributes more significantly than any other toward the nicety and precision of its detail.

That a firm of architects need by no means best be supposed to "specialize" in a "style" (thereby running danger of narrowing its sensibilities) might be proved, after a study of the foregoing interiors, by examining the very charming Adam dining room of the L. Z. Leiter house. Here is refinement thrice refined, and, withal, a distinctly happy rendering

of a historic decorative style which is, perhaps, to be reckoned the most difficult of all to reproduce convincingly to-day. And again there are the naively simple interiors of the Baylies cottage, remarkable for their adherence to the more rugged but home-like ideals of our earliest Colonial architecture. If the architect, like the artist of Plato's definition, is one who "brings all things into order, making one part to harmonize and accord with another, until he constructs a regular and systematic whole"—certainly Parker, Thomas & Rice, by their showing of widely diverse work, involving widely diverse requirements, deserve, for the remarkable consistency with which they have done this, sincere critical commendation. C. M. P.



THE PRESIDENT'S ROOM, COLUMBIAN NATIONAL LIFE INSURANCE BUILDING, BOSTON, MASS.

Parker, Thomas & Rice, Architects.



COTTAGE ON THE ESTATE OF WALTER C. BAYLIES, ESQ., TAUNTON, MASS.
Parker, Thomas & Rice, Architects.



RESIDENCE OF CHARLES E. BRYAN, ESQ., HAVRE DE GRACE, MD.
Parker, Thomas & Rice, Architects.



HALL, RESIDENCE OF CHARLES E. BRYAN, ESQ., HAVRE DE GRACE, MD.
PARKER, THOMAS & RICE,
ARCHITECTS.



INTERIORS OF THE COTTAGE ON THE ESTATE OF WALTER C. BAYLIES, ESQ.,
TAUNTON, MASS.
Parker, Thomas & Rice, Architects.



DETAIL OF DOOR, COTTAGE ON THE
ESTATE OF WALTER C. BAYLIES, ESQ.
TAUNTON, MASS.



GARDENER'S COTTAGE, ESTATE OF OLIVER
AMES, ESQ., NORTH EASTON, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



RESIDENCE OF E. S. WILLIAMS, ESQ., NAHANT, MASS.
PARKER, THOMAS & RICE,
ARCHITECTS.



ENTRANCE DETAIL, RESIDENCE OF
E. S. WILLIAMS, ESQ., NAHANT, MASS.
PARKER, THOMAS & RICE, ARCHITECTS.



TWO WAREHOUSES, BALTIMORE, MD.
Parker, Thomas & Rice, Architects.



ON THE WORK OF THE LATE DÉSIRÉ DESPRADELLE

~BY FRANK A. BOVRNE, M.I.T. '95



ON MONDAY evening, March 10, 1913, memorial exercises preliminary to opening an exhibition of the work of the late Désiré Despradelle, architect and professor of architecture for 20 years at the Massachusetts Institute of Technology, were held at Copley Hall, Boston, Mass., with memorial addresses before a large number of architects, students and others.

The hall was well arranged and hung and the decorations showed the characteristic genius of the architectural département of the Institute of Technology.

Mr. R. Clipston Sturgis spoke of the extent of Despradelle's work, and of architectural development in the course of his 20 years in this country. Guy Lowell recalled his atelier-Pascal—in Paris; Thomas Hastings, of the firm of Carrere & Hastings, spoke of his influence in America in the teaching of planning, and legitimate methods of study and composition. Dr. Maclaurin, of the Institute of Technology, who was introduced as about to receive the best kind of an architectural education in the construction of the new Institute buildings, spoke of Despradelle's sympathy and enthusiasm and notably of the power, so rare in a teacher, of being able to develop the student's own abilities rather than impress on him the point of view of the instructor. "He never forced a student into his mode of thinking or method of attacking a problem. The campaigns of his pupils would require a map of the whole country."

The writer of these notes could add many personal incidents of the first few years after Despradelle's arrival at the Institute; how, when not more than a third of the students could understand French, his facile black pencil and the students' meagre translation made his meaning understood. He would stop to talk with the students on the street, and I remember while standing with him near Trinity Church where one sees the fine composition of the apse of Trinity and the front of the Public Library at the same glance, how he grasped my arm and called my attention to the wonderful artistic feeling and inspiration of that part of the Church compared with the more studied, but colder front of the Library.

I shall never forget the enthusiasm he created on his arrival at the Institute. Even in the junior class his visits were almost daily, and we all had the inspiration of his enthusiasm fresh from the ateliers of Paris.

His influence changed the attitude of students from individual competitors to competitors who were mutually helpful. From a class where the students were working each in his own little cell, looking askance at anyone who glanced at his work he brought up a group of mutually helpful critics, with co-operation and assistance on the same drawings by lower and upper classmen.

He was a good story teller and at one of the students' dinners, he told of his difficulties with the English language, how the waiter had brought him a cigar when he asked for sugar, and how he had misdirected a family of immigrants and sent them toddling from the Park Square station toward the Institute when they had asked for a point in



(From the Despradelle Memorial Exhibition.)

DETAIL, BEACON OF PROGRESS MONU-
MENT. DRAWN BY DESIRÉ DESPRADELLE.



(From the Despradelle Memorial Exhibition.)

DETAIL, BEACON OF PROGRESS MONU-
MENT. DRAWN BY DESIRE DESPRADELLE.

exactly the opposite direction; that assumption of a knowledge of the ways of the streets of Boston burdened his conscience for a long time. He lived at that time on Beacon Hill and disliked waiting for the West End car, "*ce petit coquin jaune*" as he called it.

As an instructor his ability to reveal to students that the proportions of a building could be developed through the plan was far ahead of that of any other teacher. He was always interested in the welfare of his students after graduation, and was willing to help when they went to him with their problems.

Graduates from his classes have since taught in the University of Pennsylvania, Washington University, St. Louis; University of Illinois, and the Carnegie Technical Schools. He contemplated publishing a book on planning and plans, and it is to be regretted that this was not done. However, the instruction that he gave not only at the Institute but also at the Boston Architectural Club, and by lectures at Harvard and in New York, has been better than any other method of carrying his influence throughout the architectural profession. As Dr. Maclaurin said, "passing into the tradition of a great school, his influence can never fade from the land."

The exhibition was open March 11 to 15, at Copley Hall, the room made familiar by the Whistler, Sorolla and other exhibitions of the Copley Society.

The first impression was amazement at the amount of individual work by Despradelle. Two of his prize designs made as a student at the *Ecole des Beaux Arts*, Paris, *Siège d'un Gouvernement Militaire*, in the *Concours Labarre* and *Chateau d'Eau*, in the *Concours Rougevin*, were loaned by the French Government; and also the *Etablissement de Bains*, which received the highest award in 1889 in the competition for the *Grand Prix de Rome*, receiving the second *Grand Prix*. Two other *Grand Prix* designs were exhibited, and "*monument à Jeanne d'Arc*," made in 1890, and the "*Musée d'Artillerie*" made in 1892.

The "skyscraper" drawing made while a student at the School of Fine Arts, lacked any strong structural or

base lines near the ground, as he always insisted that this was one of the conditions of skyscraper design—practically to put a building on a plate glass base with as much circulation at the ground level as possible; this characteristic is found in the mercantile buildings which he designed.

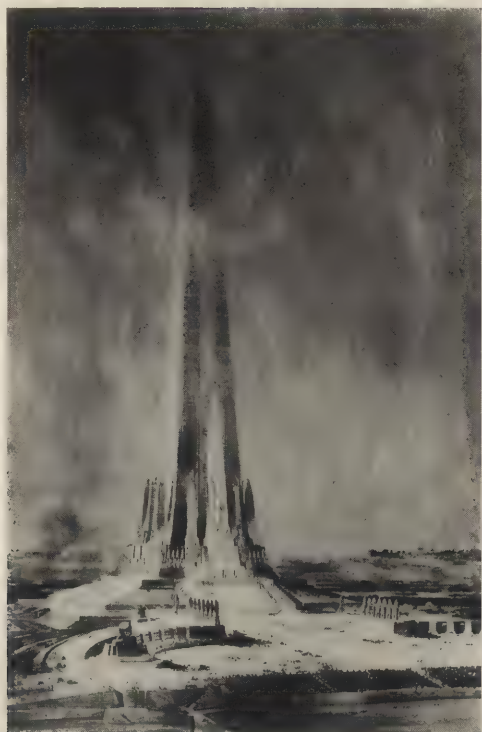
The studies for the Phoebe Hearst competition for the University of Chicago were fully as interesting in their way of showing the development of the design as the final drawings which were lost in the San Francisco fire.

The Beacon of Progress received the first gold medal at the Paris Salon in 1900. This design was the result of a series of studies inspired by the Columbian Exposition at Chicago in 1893 which he saw as one his first impressions of America. The suggestion of this shaft, 1,500 feet high, erected on the site of the Exposition, would be a worthy memorial of the White City, and typical of the progress of the American people.

The large elevation drawing had the place of honor at the end of the Exhibition Hall, and on either side were the two smaller perspective drawings that were purchased by the French government and loaned for the exhibition from the Luxembourg Gallery. These and the detail drawings were sufficient in number to form a complete exhibition in themselves; in fact, one of the most interesting arrangements of drawings ever made at the Institute of Technology was the semi-circle in the studio of the Architectural Building of these drawings soon after their completion.

Despradelle's work as a practising architect, including the competition drawings and studies for the Peter Bent Brigham Hospital, his last work, were placed in Allston Hall, the smaller exhibition room. The plan of this hospital, its relation to the Harvard Medical School Buildings, the well worked out exterior and interior circulation, shows the practicability of the method of planning that he taught.

Studies were also exhibited showing his advisory work, sketches that he made for the proposed Harvard Library, and for the Boston Museum of Fine Arts.



THE "BEACON OF PROGRESS"—A MONUMENT DEDICATED TO THE GLORY OF THE AMERICAN PEOPLE, BY D. DES-PRADELLE.

(First Gold Medal, Paris Salon, 1900, Luxembourg Gallery.)

where, through one of his favorite pupils, he was able to see his preliminary studies carried into execution.

Among the last of his personal efforts and in many ways showing his eminence in planning, his thorough knowledge of the needs of the Institute, and his interpretation of architectural style in a form pleasing to American taste and appropriate to its purpose and environment, his design for the new location of the Massachusetts Institute of Technology is preeminent.

It will be difficult to conceive a better scheme, and it is to be hoped that the inspiration of his twenty years' association with the Institute will not be lost in the design for the new buildings as they are now to be built.

The three accompanying illustrations selected from numerous drawings and studies of the Beacon of Progress, show

not only the scale of this enormous monument, but express admirably the importance of one of the elements of design on which Despradelle always insisted, the expression of scale. The perspective, with the cloud drifting across the monument gives a good idea of its size, but this is greatly enhanced by the detail elevation which shows the smaller obelisks, the huge amphitheatre at the base of the monument between the double line of lions which are so small in the drawing as to be hardly distinguishable, yet are clearly shown in the large perspective detail. The drawing of the monument and the perspective detail are owned by the French government.

WORK AS A STUDENT AT THE
"ECOLE DES BEAUX ARTS," PARIS

- 1 Siege d'un Gouvernement Militaire. Concours Labarre (Prix).
 - 2 Chateau d'Eau. Concours Rougevin—Prix.
 - 3 Pont. Concours d'Ecole.
 - 4 Monument dans un Pantheon. Concours Achille Leclere.
 - 5 Sky-scraper. Prix de reconnaissance des Architectes Americains.
- Numbers 1 and 2 loaned by the French Government
"Administration des Beaux Arts."

IN COMPÉTITION FOR THE GRAND PRIX DE
ROME.

- 6 Etablissement de Bains. 1889. 1er—2nd Grand Prix.
 - 7 Monument a Jeanne d'Arc. 1890.
 - 8 Musee d'Artillerie. 1892.
- No. 6 loaned by the French Government
"Administration des Beaux Arts."

PHOEBE HEARST COMPETITION
FOR THE UNIVERSITY OF CALIFORNIA.

- 9 Studies.
- (The Final Drawings were destroyed in the San Francisco fire, April, 1906.)

BEACON OF PROGRESS.

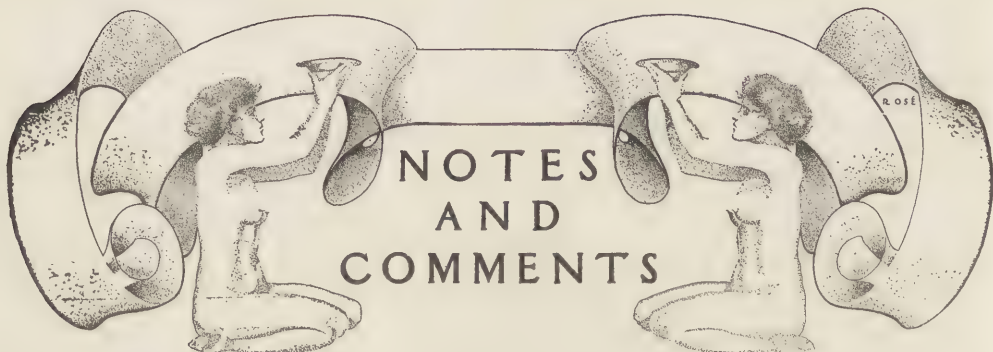
- 11 A Monument dedicated to the Glory of the American People.
(First Gold Medal, Paris Salon, 1900.)
- 12 and
- 13 Original Drawings purchased by the French Government and loaned to the exhibition from the Galerie du Luxembourg.

ADVISORY WORK.

- 14 Harvard Library.
- In collaboration with Messrs. C. A. Coolidge and Guy Lowell.
- 15 Massachusetts Institute of Technology.
 - 16 Boston Museum of Fine Arts. Guy Lowell, Architect. Advisory Architects, D. Despradelle, Edmund M. Wheelwright, R. Clipston Sturgis.

WORK AS PRACTISING ARCHITECT.

- 17 Drawings and Studies for Business Buildings, etc.
- 18 Competition Drawings and Studies for the development of the Peter Bent Brigham Hospital.
- 19 Miscellaneous.



Arbitration vs. Litigation.

We have received a copy of an interesting monograph, just off the press, from the pen of Mr. G. Alexander Wright, who should be reasonably well-known by the profession from his previous manual known as "Wright on

Qualities."

This newly published work, "Wright on Building Arbitrations," should prove of definite assistance to any members of the profession who are unfortunate enough to find any work upon which they are engaged to be threatened with or involved in litigation. In the first place Mr. Wright's new manual forcefully brings out the advantage of arbitration over suits of law for the adjustment of building and technical disputes, and secondly describes in detail the various steps desirable in arranging arbitration, outlining succinctly the several duties of the Building Arbitrators—what to do and what to avoid in conducting such technical disputes as may arise in building operations.

In the author's preface, the work is further described as follows: "'Building Arbitrations' is not a law book in any sense of the word, nor is it intended to be used as such. The principles of Arbitration are, however, not difficult for the layman to understand, and my aim has been to compile and codify the facts in a common-sense and convenient form, with such information as will enable the Architect, the Contractor and the Engineer to act intelligently, and in order, when it becomes necessary, to occupy the honored position of Arbitrator or Umpire without, I hope, transgressing those statutory requirements essential to a properly conducted Arbitration." A synopsis of the contents should serve to acquaint anyone interested in the subject with the scope of the manual: Introduction—Building Arbitration; Its Advantages. Arbitration: Its Place in the Work of the Architect, Con-

tractor and Engineer. Arbitrators: Their Qualifications, Duties, Etc. Submitting Matters in Dispute to Arbitration; the Submission, Mode of Procedure, the Award. Compensation of Arbitrators and Umpire. Convenient Forms.

A Vanishing Landmark.

Each year finds New York with fewer architectural and historical landmarks—we can watch the demolition of the dismal and hideous blocks of "brown stone fronts" without a tremor. Neither architecturally nor historically could they be felt a loss, but when such demolitions occur as that which swept away half of grand old "Colonnade Row" on Lafayette Place, and when it is proposed to tear down the old Astor House on lower Broadway, there seems cause for serious regret. Monuments of the classic revival are rare in this country, and especially in New York City, and now we learn that the site of old "No. 7 State Street" is to be occupied by a tall office building. Thus there will vanish another century-old landmark, for the picturesque building was erected about 1800, and has been the scene of many happenings of local historical interest. Architecturally, it is very interesting to note that the facade, with no less than five angular breaks, or changes in direction, has been given a superficial but successful effect of symmetry by the bold and ingenious expedient of running a colonnade directly across it. The proportions of the horizontal divisions are almost identical with those of "Colonnade Row," except that the base is a trifle higher, and rests upon a basement above the street level, instead of directly upon the street. Also the columns are taller and more attenuated, yet, in their use here, peculiarly pleasing and dignified.

Speaking of the numbered days of old "No. 7," a newspaper writer says:



A VANISHING LANDMARK—NO. 7 STATE STREET, NEW YORK CITY
Built about 1800.

"Coinciding with the passing of the old Astor House, this wiping out of the picturesque State Street corner will cause to be sadly missed a century-old landmark that linked the present Battery Park with the earliest white man's settlement and fortification of Manhattan Island.

"When this house was in its prime the real old Knickerbocker merchants who bequeathed their honored names to subsequent generations of New Yorkers lived mostly in the neighborhood of the Bowling Green and the Battery.

"Stephen Whitney, one of New York's few millionaires in his day, and a well-known character in the young metropolis, had his home on Bowling Green Place. Robert Goelet lived on State Street, and his brother Peter at No. 32 Broadway.

"Towards the middle of the last century the Rhinelanders moved away uptown to Washington Square, the Schermerhorns to Great Jones Street and the Leroys to Lafayette Place. But these people were futurists, so to speak. A large number of the old families of the city still lingered around lower Broadway and the adjacent streets.

"The Battery was always the objective point of their afternoon promenades, whether they lived in its immediate vicinity or as far uptown as the then center of fashion, Bleecker and Bond Streets. The Sunday parade of belles and beaux moved southward past Trinity Church and down to the old trysting place, the locust trees, grassy common and gravelled walks, across which sunny State Street looked upon grim Castle Garden.

"By the way, in excavating for the foundations of the new Barge Office, a number of antique Revolutionary cannon were unearthed.

"Pearl street was a grand rendezvous of these bygone captains of commerce, the New York shipping merchants. In that sadly altered thoroughfare to-day some of their weather-beaten and faded signboards remain as relics; and oldtimers passing by can almost fancy the ghosts of a lost merchant marine haunting their slackened footsteps."

**A
Southern
Exposition.**

Below is shown a reproduction of the preliminary drawing for the general layout of The "Southern States" Exposition to be held in New Orleans. It is stated that the idea of this exposition is not necessarily to compete with the Panama-Pacific Exposition to be held in San Francisco in 1915, but is the result of a decision of certain prominent Southern merchants and others to create a permanent home for exhibits of the manufactures and products of the South and also to make the exposition an occasion for bringing the Southern States into a closer relationship with the products and commerce of the Latin-American Republics, for whom New

Orleans is the logical doorway to the United States.

The architects selected to carry out the planning and design of the exposition are Stevens and Nelson of New Orleans, with F. W. Fitzpatrick, of Washington, D. C., as consulting architect.

**Honors
Abroad.**

Mr. B. J. S. Cahill, of San Francisco, was recently elected a fellow of the Royal Geographical Society of London.

Mr. Cahill has devoted much time to the city planning problem, being one of the first in the United States to project city improvements on a broad scale. He has even been called the originator of the "civic center."

The "civic center" idea was first conceived by him in 1904, when he presented the idea to the late Daniel H. Burnham.

Among Mr. Cahill's contributions to geographic science is his newly invented project for laying out all the land of the world in one comprehensive map without exaggeration or distortion.

The only other member of the American Institute of Architects who enjoys the distinction conferred upon Mr. Cahill, is Ralph Adams Cram, of Boston.



PRELIMINARY LAY-OUT FOR THE SOUTHERN STATES EXPOSITION, NEW ORLEANS
Stevens & Nelson, Architects.

F. W. Fitzpatrick, Consulting Architect

THE ARCHITECTURAL RECORD



Boulogne l'aime peint

L'ARCHITECTURE

B. Avdron Sc.

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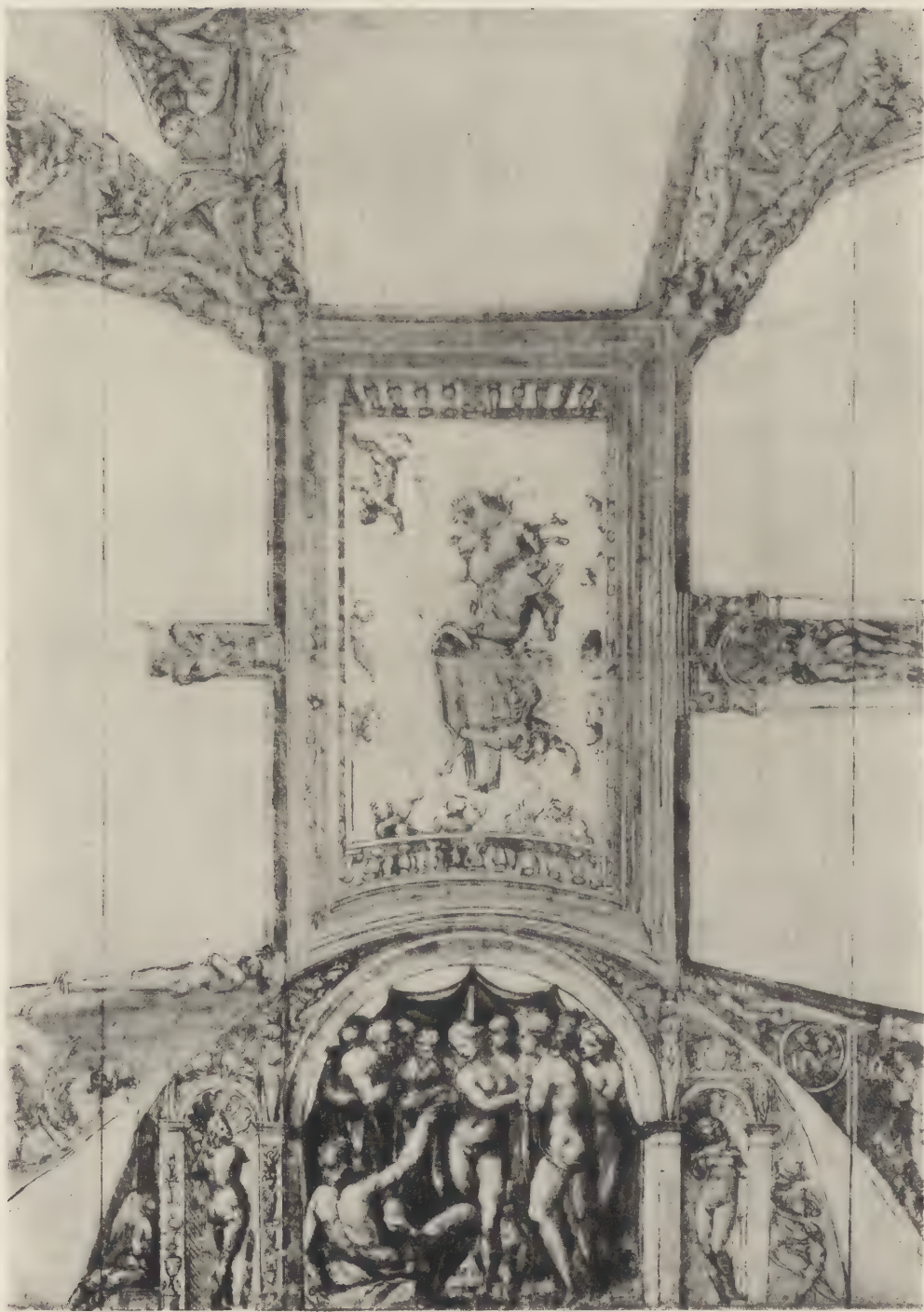
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From a Drawing in the Uffizi Gallery.

A CEILING DECORATION. DRAWN
BY BALDASSARE PERUZZI.

THE ARCHITECTURAL RECORD

SEPTEMBER, 1913

VOLUME XXXIV



NUMBER III

THREE DIMENSIONS IN ARCHITECTURAL DRAWING

THE LESSON OF THE ITALIAN MASTERS
BY ARTHUR G. BYNE.



THAT THE architects of the Renaissance were often painters and sculptors as well needs no emphasizing here, except in so much as it may explain why their architectural draughting is more interesting than that done to-day. The objects peculiar to architectural ornament have not changed since the old days; but the architect's training, materials and instruments have, as was inevitable. Greater attention (perhaps undue attention) is paid to-day to the technique of draughting. It has become a highly specialized art in itself that has evoked a long list of mechanically perfected instruments. The draughtsman in competitions submits to juries drawings that are amazingly clever and "finished," and this "finish" has become such a looked-for convention that a re-incar-

nated Bramante or Sansovino with his freely-interpreted drawing on much bescribbled paper would have no consideration at the hands of the jury even were his scheme never so clever.

The reason for this concentration on draughting to the point that one who excels in it can command a high remuneration (as remuneration goes in the profession) is obvious. The day is long passed when the architect could make a free and spirited drawing, knowing that it would be properly interpreted by capable and sympathetic artisans. The present-day lack of these latter makes it imperative that the minutest details be painstakingly drawn out in the architect's office (hence the great office force necessary for a busy firm). This passing on of the one drawing from designer to subordinates is the first step towards robbing it of sentiment. Next, ornament may almost be said to have become standardized. Every important office has a good collection of architec-



DRAWING FOR A FOUNTAIN HEAD.

By Agostino Carracci.

tural books and photographs, from which sources details are taken bodily and therefore lack the variety they might have had if they had been studied at first hand by the designer.

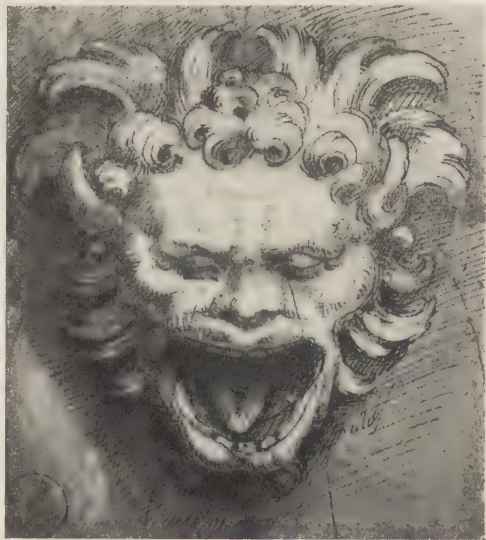
Although a man of judgment and talent often does incorporate old details into an admirable design, if his drawing is shown to the *nouveau* as a type to follow, his attempt at doing so not only lacks the animation of his model, but he is apt to miss entirely the sentiment that inspired the old originals. Often it is merely *clever* modern draughtsmanship that is held up as worthy of imitation, and this the tyro is apt to confuse with good design. He cannot discern that it is, in the last analysis, little more than the knack of exaggeration—of emphasizing some part which has in reality but little importance just for the sake of showy drawing; he cannot see that if this sparkling delineation were actually carried into execution it would not only lack sentiment and conviction, but would probably be cheap and meretricious architecture.

I remember visiting a newly-finished Christian Science Church some years ago with an architect whose beautiful

and sympathetic delineation of Italian ornament had made him an authority on the subject. The "Christian Science" ceiling, massive and richly coffered, had been much talked about. As he stood studying it he turned to me and said: "Can't you just imagine what the drawing for this ceiling looked like? Can't you see the clever spotting on the paper, the lines all beautifully crossed and each one ending in a dot? The whole thing, in fact, just dripping with dots?"

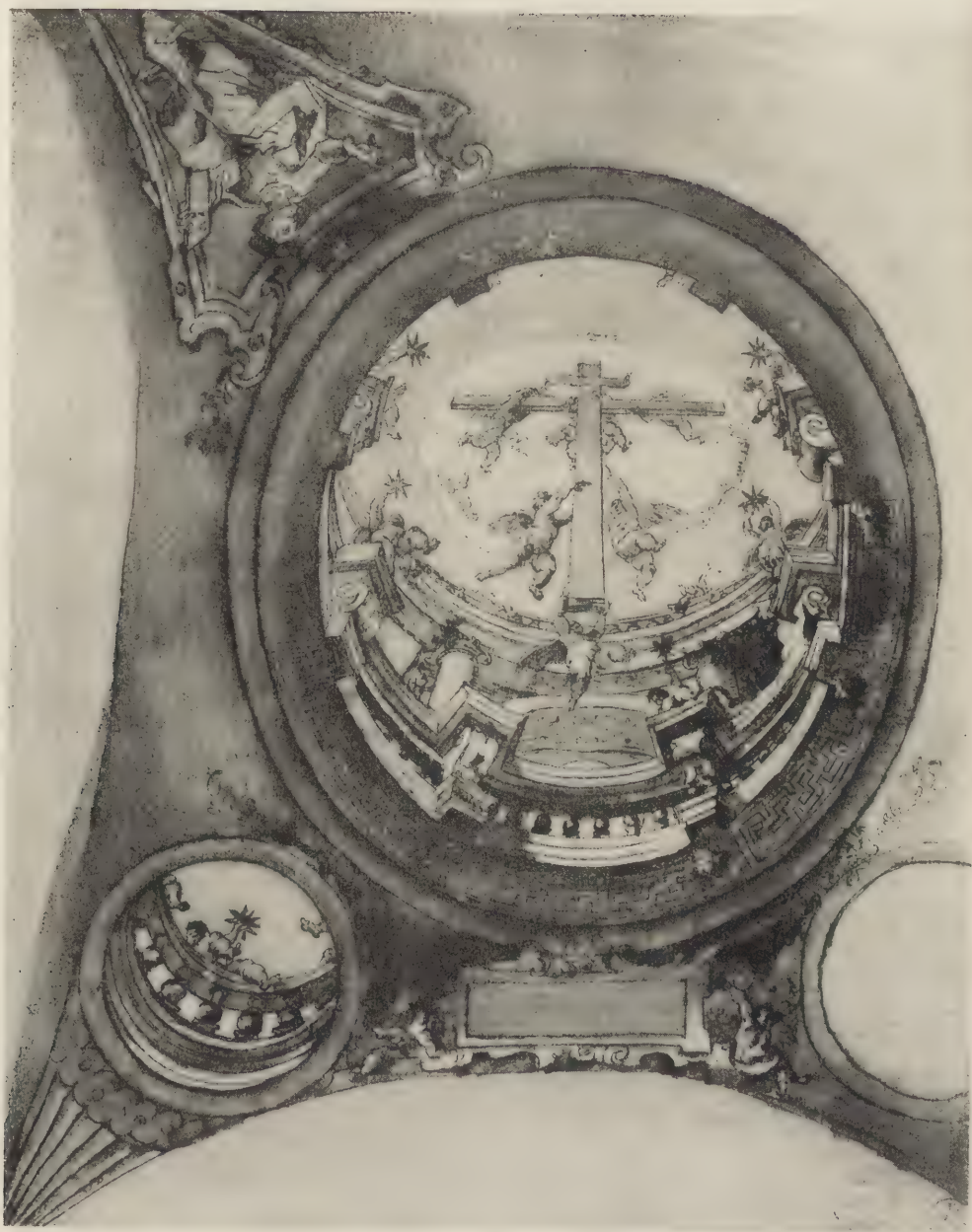
We all know this dot-and-dash stage referred to, so alluring to the student. Whether, even in student days, it is worth acquiring is doubtful; in any case it is well to drop it as soon as one has acquired it. To learn to control a strong firm line should be the aim. If, in passing from the wriggly, fuzzy sort of line to the firm sort the dot-and-dash is a necessary transitional stage, it should not be dwelt on and cherished as the desideratum.

The many instruments now available for draughting are another factor that militate against its interesting qualities. The student does not wait till he has become expert at free-hand work, but aims to possess an expensive outlay of instruments the moment he enrolls in an architectural school. Therefore, instead of



DRAWING FOR A FOUNTAIN HEAD.

By Giulio Romano.

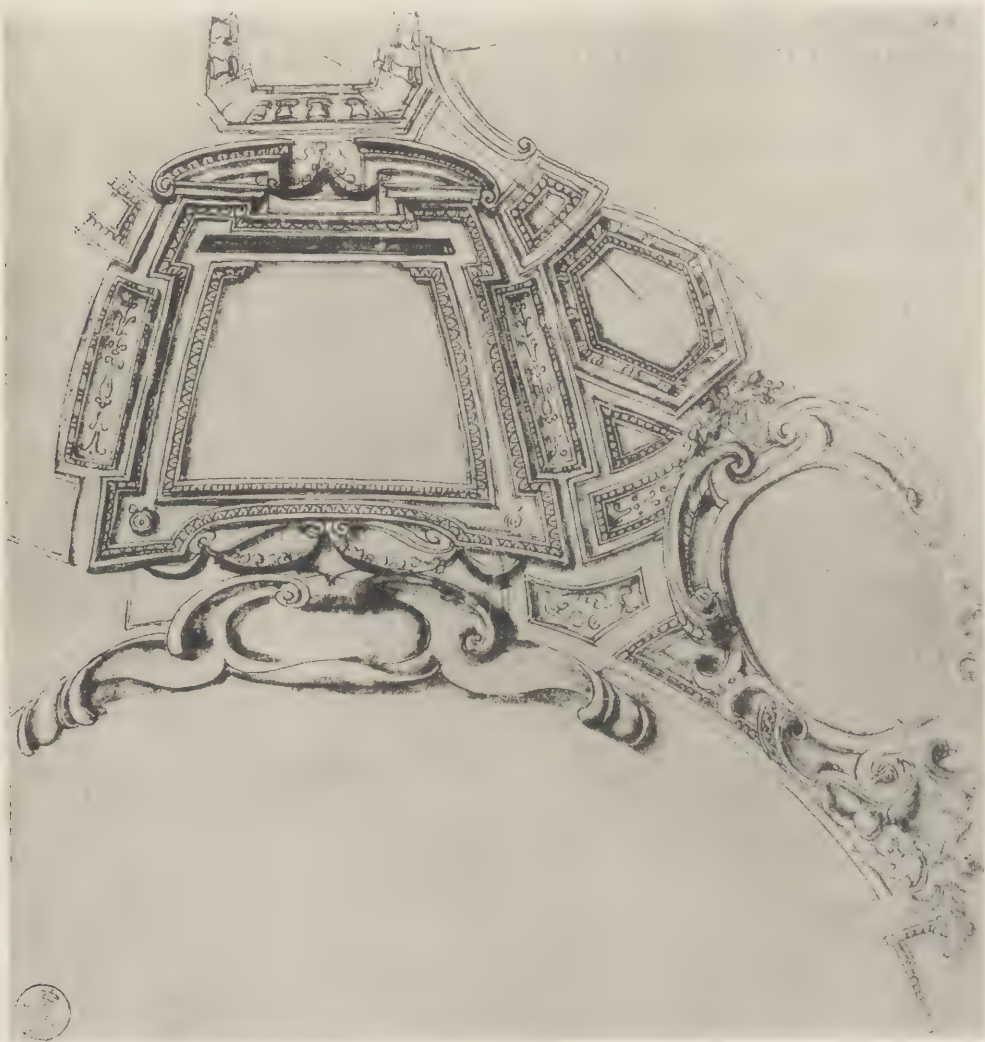


From a Drawing in the Uffizi Gallery.

DECORATION FOR A CUPOLA.
DRAWN BY CHERUBINI ALBERTI.

using these judiciously as an adjunct to free-hand work, he uses them almost exclusively and looks upon whatever free-hand training the school insists upon as more or less of a bore; unless, of course, he has some special talent for

work will not do. Then the need of a little training in drawing from nature is sorely felt. They wish they had studied more from life; they wish they had studied ornament in the three dimensions; or at least they wish the work



DRAWING FOR QUARTER OF A VAULT.

By an unknown architect of the 17th century.

it. To what an extent expert instrument draughtsmen "fall down" when required to express themselves without mechanical aids is often painfully visible in their large-scale and full sizing, where the mere knack of indication that passes muster on small-scale

of those early masters who did do these things had been brought more often to their attention.

And this is the point: Might not the schools, instead of displaying around their rooms so plentifully the huge *projects* of Paris scholarships which though



AN ARCHITECTURAL DECORATION.
DRAWN BY FRANCESCO SALVIATI



CONFLICT BETWEEN A DRAGON AND A LION.

Drawn by Leonardo da Vinci.



A DRAWING OF PAPAL INSIGNIA.

By Antonio da San Gallo.

clever in the extreme, encourage mainly a sort of paper architecture—instead of these might not the plan, problems and fugitive detail drawings of the early architects be displayed? Such models for study and imitation would undoubtedly result in an honest straightforward presentation rather than a merely *chic* indication. Even juries are beginning now to discriminate between the two. Students should do the same.

By an honest presentation is meant that sort of drawing that endeavors to approximate what a subject will be when executed. To do this one must consider the third dimension just as seriously as the breadth and height. This principle is just as applicable to detail as to the whole. By keeping in mind, for instance, the relief or depth of the ornament the draughtsman could take greater latitude in the other dimensions and thus a motif which might be very much out of scale in high relief might be in perfect scale in low relief, even though it covered a greater square area. One can prove by his own observation

that much of the *naïvete* and charm of the Renaissance egg and dart moulding is due to its being out of scale so far as its breadth and height is concerned, but brought back into scale by the diminution of the relief. Of course, in an example as simple as this the shadows play an almost negligible part; but in a more complex example, unless these were studied carefully, the motif when executed might be an unpleasant surprise.

This study of the shadow, this modeling on paper, is well illustrated by the accompanying drawings from the splendid architectural collection in the Uffizi, in Florence. One feels, in every instance, that the draughtsman knew how he wanted a thing to look when finished and in place. Every motif was studied in the right manner and honestly put down on paper. Of course, a modern might justly say that as these architects were aided by that extinct genius, the accomplished artisan, who did not need a hard and fast working drawing to go by, it is unfair to compare our drawings with theirs. But the intention of this

article is merely to compare our fully developed studies not yet taken in hand by the tracers with these old-time ones, and to see if we might not do well to look at a motif in the same way while traversing the stages that lead up to the finished working drawing. It is interesting to note that most of the examples shown are either in semi- or in geometric-perspective. The advantages of this method are never disputed, but the additional labor it entails has made

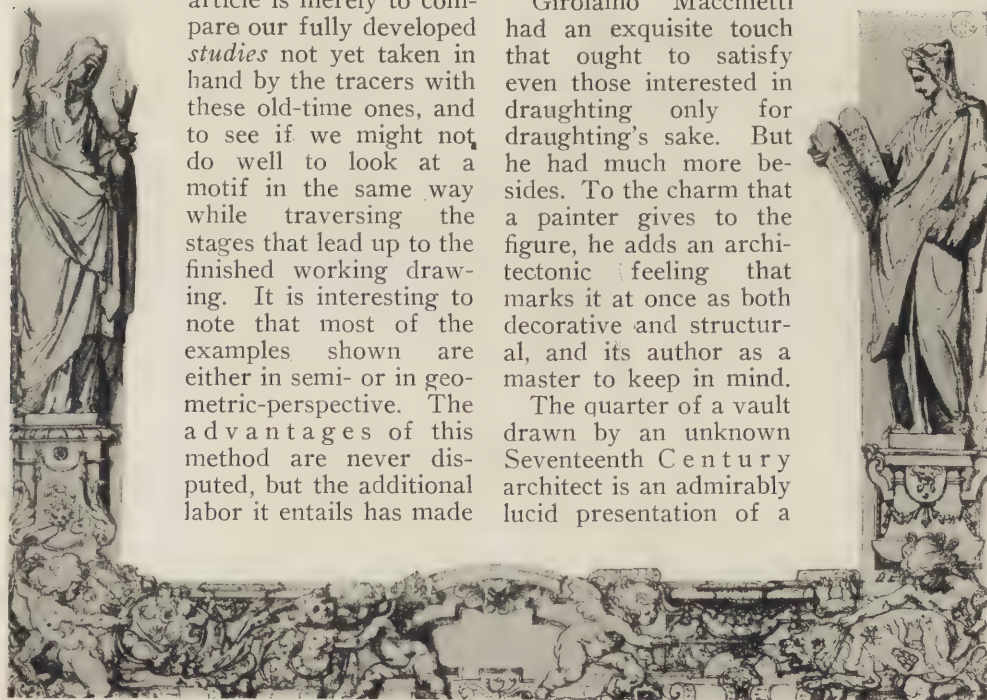
it unpopular in our busy modern practice.

While these illustrations speak for themselves, to point out a few of the salient characteristics of the various masters might not be amiss to the student.

Baldassare Peruzzi, who is tardily being recognized as one of the greatest architects of the Renaissance would hardly get much applause as a brilliant architectural draughtsman to-day. His jottings on paper look almost careless, yet the work executed from them was brilliant. Not a moulding of his chef-d'oeuvre, the Palazzo Massimi in Rome, but is restrained and of delicate profile, and that he intended it to be so, that he visualized it as such, is evident even in these loose sketches. Antonio da San Gallo the Younger it will be seen was more architectural as we understand it, yet even he has modeled his drawing very completely. This specimen hardly does him justice, however, and those interested could find far more brilliant examples.

Girolamo Macchietti had an exquisite touch that ought to satisfy even those interested in draughting only for draughting's sake. But he had much more besides. To the charm that a painter gives to the figure, he adds an architectonic feeling that marks it at once as both decorative and structural, and its author as a master to keep in mind.

The quarter of a vault drawn by an unknown Seventeenth Century architect is an admirably lucid presentation of a



DRAWING FOR A TAPESTRY BORDER.

By Lodovico Cigoli.



From a Drawing in the Uffizi Gallery.

SOFFIT AND SPANDRIL
DRAWN BY BALDASSARE PERUZZI

motif difficult to express, and might suffice as a working drawing for even less capable builders than those of his century.

Cherubino Alberti shows a wonderful working knowledge of perspective. Giulio Romano, the architect-decorator who embellished the famous Villa Madama, made drawings that were unrestrained and full of fantasy yet strictly architectural.

Benvenuto Cellini and the great Leonardo da Vinci, though not architects, had each an unlimited store of decorative detail at his command. Leonardo committed every thought to paper with his own peculiar technique, saints, dragons, models for flying machines, and even the most mechanical drawings, for these last have a free artistic quality which might be profitably brought back into draughting to-day.



PORTION OF AN ARCHITECTURAL COMPOSITION.

Drawn by Giovanni Battista Cremonini.



FRONT ELEVATION—MAUSOLEUM OF O. H.
P. BELMONT, ESQ., WOODLAWN, N. Y.
HUNT & HUNT, ARCHITECTS.



INTERIOR—MAUSOLEUM OF O. H. P. BELMONT, ESQ., WOODLAWN, N. Y.
Hunt & Hunt, Architects.

A REVIVAL OF FRENCH GOTHIC ARCHITECTURE

A MAUSOLEUM AFTER SAINT HUBERT'S CHAPEL

HUNT & HUNT ARCHITECTS.

BY L. R. McCABE.



SAINT HUBERT'S Chapel of Amboise—a mediæval architectural gem of Southern France—has now a counterpart in New York's costliest City of the Dead—Woodlawn Cemetery. To the passing world this counterpart is known as the Belmont Mortuary Chapel. It is Mrs. O. H. P. Belmont's memorial to her husband who is interred there, and is the prospective resting place of the mother of the Duchess of Marlborough.

The chapel, which has been some time in construction, was opened last fall to the public. The story of its design should prove practically suggestive to makers of the beautiful, and scarcely less interesting than the history of its architectural forbear, for centuries the joy of artists and the delight of tourists in Southern France.

To have bodily transported to Woodlawn Cemetery, the original Saint Hubert Chapel, would have been hardly less Herculean a task than is the achievement of the architects, Messrs. Hunt and Hunt, in readjusting this mediæval Gothic masterpiece to New World setting, without sacrifice of its storied feel-



DETAIL—MAUSOLEUM OF O. H. P. BELMONT,
ESQ., WOODLAWN, N. Y.
Hunt & Hunt, Architects.

ing, haunting beauty of line, perspective and color.

Saint Hubert's Chapel dates from the end of the fifteenth century. It was built in the reign of Charles VIII., and adjoins the historic Château d'Amboise, which King Charles converted from a formidable fortress into a palace.

Saint Hubert's Chapel at Amboise is

supported by a projecting rock which serves as a *contre-fort* to an immense terrace, which separates the chapel from the Château at a height which dominates the entire city of Amboise, and the Valley of the Loire, and commands a distinct view of the town clock of Tours. From earliest times the forests of Amboise were given over to royal hunts, which doubtless accounts for the chapel's dedication to Saint Hubert, despite this patron of the chase was of German origin. The chapel's decoration, as befits its patron, is rich in symbols of the hunt. Additional interest lies in the fact that as late as 1878, the bones of Leonardo da Vinci, who died at Amboise, were moved from a neighboring chapel and deposited in Saint Hubert's.

Sentiment, no less than appreciation of its architectural beauty, prompted Mrs. Belmont's choice of Saint Hu-



ENTRANCE DETAIL—MAUSOLEUM OF O. H. P.
BELMONT, ESQ., WOODLAWN, N. Y.
Hunt & Hunt, Architects.



APSE ELEVATION—MAUSOLEUM OF O. H. P.
BELMONT, ESQ., WOODLAWN, N. Y.
HUNT & HUNT, ARCHITECTS.



MEMORIAL WINDOW—MAUSOLEUM OF
O. H. P. BELMONT, ESQ., WOOD-
LAWN, N. Y.

Helen Maitland Armstrong.
Hunt & Hunt, Architects.

bert as the model from which the architects, with characteristic scholarly pains and ripe skill, have evolved this memorial mortuary chapel at a cost variously estimated at three hundred thousand dollars. The late O. H. P. Belmont was an ardent follower of the hounds, in consequence, Saint Hubert's Chapel was his favorite of all the architectural beauties of Southern France.

The Belmont Chapel stands upon a slight elevation within the West gate of Woodlawn Cemetery—the stag horns and gargoyles of its graceful spire forming a dominant architectural note among the other mausoleums.

The chapel is built of limestone. In introducing limestone, the architects establish a precedent, since heretofore, Woodlawn mausoleums and monuments have been restricted to marble and granite. This restriction was founded upon the Trustee's belief that they are the only materials impervious to the havoc of time and weather.

The interior of the chapel is cement. The ground plan is the Greek cross. The structure rises sixty-five feet from the grade. A spire, preserving the exquisite design of the original, crowns the Gothic roof, while the front façade is rich with delicately executed bas relief detail. The subject of this decoration, carved out of the solid limestone, is the conversion of Saint Hubert—a veritable hunting scene with spirited horse, stag and hounds. This bas relief is above the double bronze doors.

In the tympan above this decoration is another bas relief, a large composition divided into three sections, representing, as in the original Charles VIII and Ann of Brittany, his wife, prostrated at the feet of the Virgin, carrying in her arms, the Infant Jesus.

The roof, balustrades and buttresses are profusely ornamented in carved lace and interlaced designs, while from every buttress jut the gargoyles, characteristic of this type of French Gothic architecture. The interior is rich in low relief decoration, following the conformation of the choir.

The vaults are on either side of the chancel—in the transepts or arms of the

cross, as it were. They are covered by rectangular slabs of old ivory marble, carved and pierced in a conventional design of laurel and berry, which rises some six inches from the chapel floor framing the slab. Leaf and berry are painted in natural colors. On each slab carved in low relief and also richly blazoned, are the coat of arms of the respective families. Projecting from the wall at the head of each slab are holy-water fonts converted in this instance into flower receptacles. The font at the head of Mr. Belmont's vault is filled every other day with fresh orchids—his favorite flower.

The chapel's sixteen windows are subservient to the architecture and purely decorative in design after the manner of fifteenth century stained glass. Unlike most church windows, they are literally the work of one artist, as was the case in the great storied window of the Lawyers' Club in New York City. As Michael Angelo in the Sistine Chapel eschewed the assistance of fellow artists, painting every inch of his own designs with his own hand, Miss Helen Maitland Armstrong personally selected the subjects, made the cartoons and painted the glass of the sixteen windows.

"Heretofore, in making stained-glass windows with my father," said Miss Armstrong in her studio, "my work has been confined to the painting of faces and figures. The backgrounds, generally landscapes, and all else that goes to the making of a stained-glass window was the work of my father. But these fifteenth century windows are wholly mine."

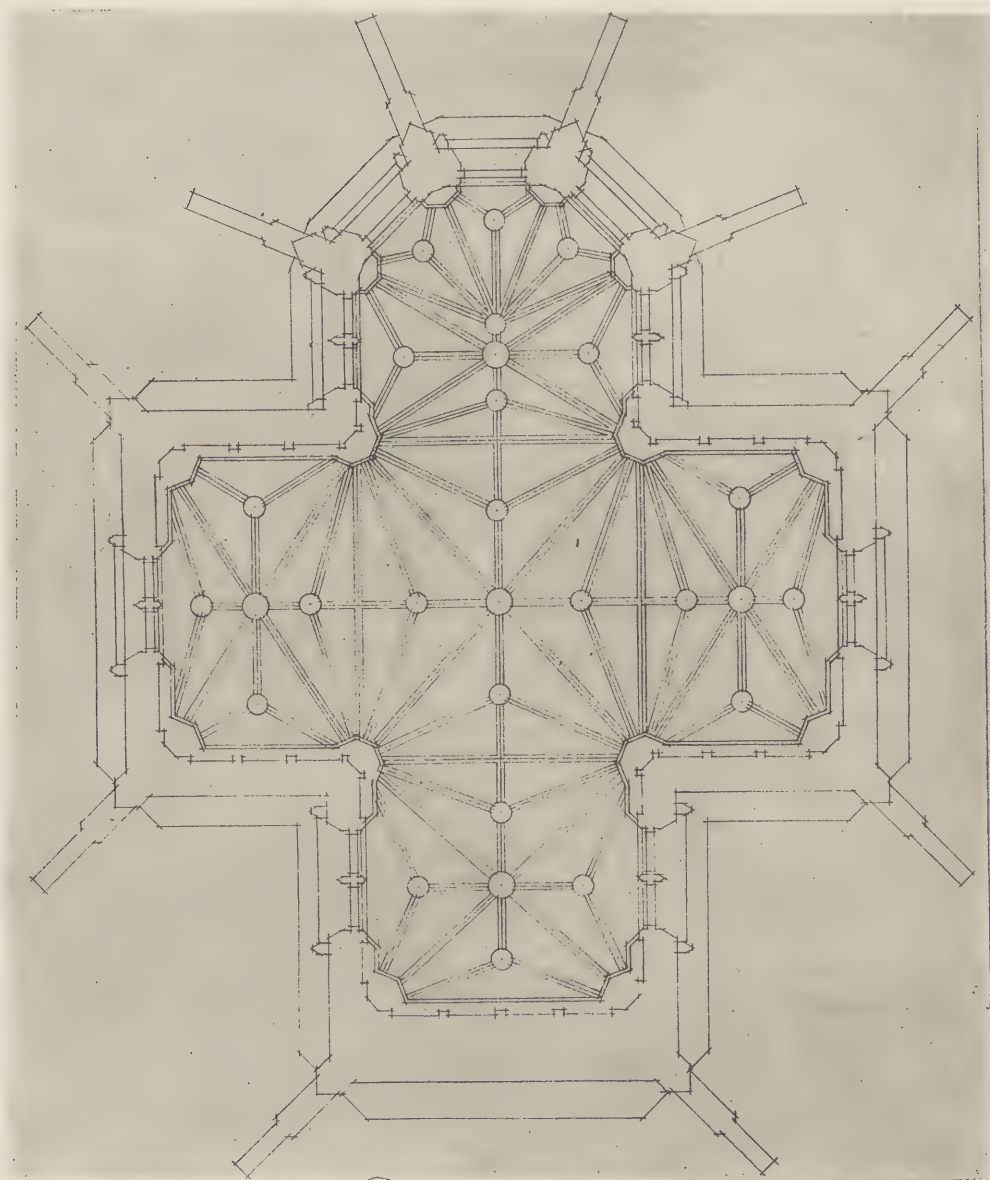
The subjects of the three chancel windows are the archangels—St. Raphael, St. Gabriel and St. Michael, each with his symbols.

Unlike American stained glass windows which too often aim at realism, the reproduction of nature in line and color, these fifteenth century windows are purely decorative, richly symbolical and perfectly conventional in their treatment. There is no suggestion of modern realism. They are made of clear glass of the same thickness throughout. There is no plating, the laying of one



MEMORIAL WINDOW—MAUSOLEUM OF
O. H. P. BELMONT, ESQ., WOOD-
LAWN, N. Y.

Helen Maitland Armstrong.
Hunt & Hunt, Architects.



VAULTING PLAN—MAUSOLEUM OF O. H. P. BELMONT, ESQ., WOODLAWN, N. Y.
Hunt & Hunt, Architects.

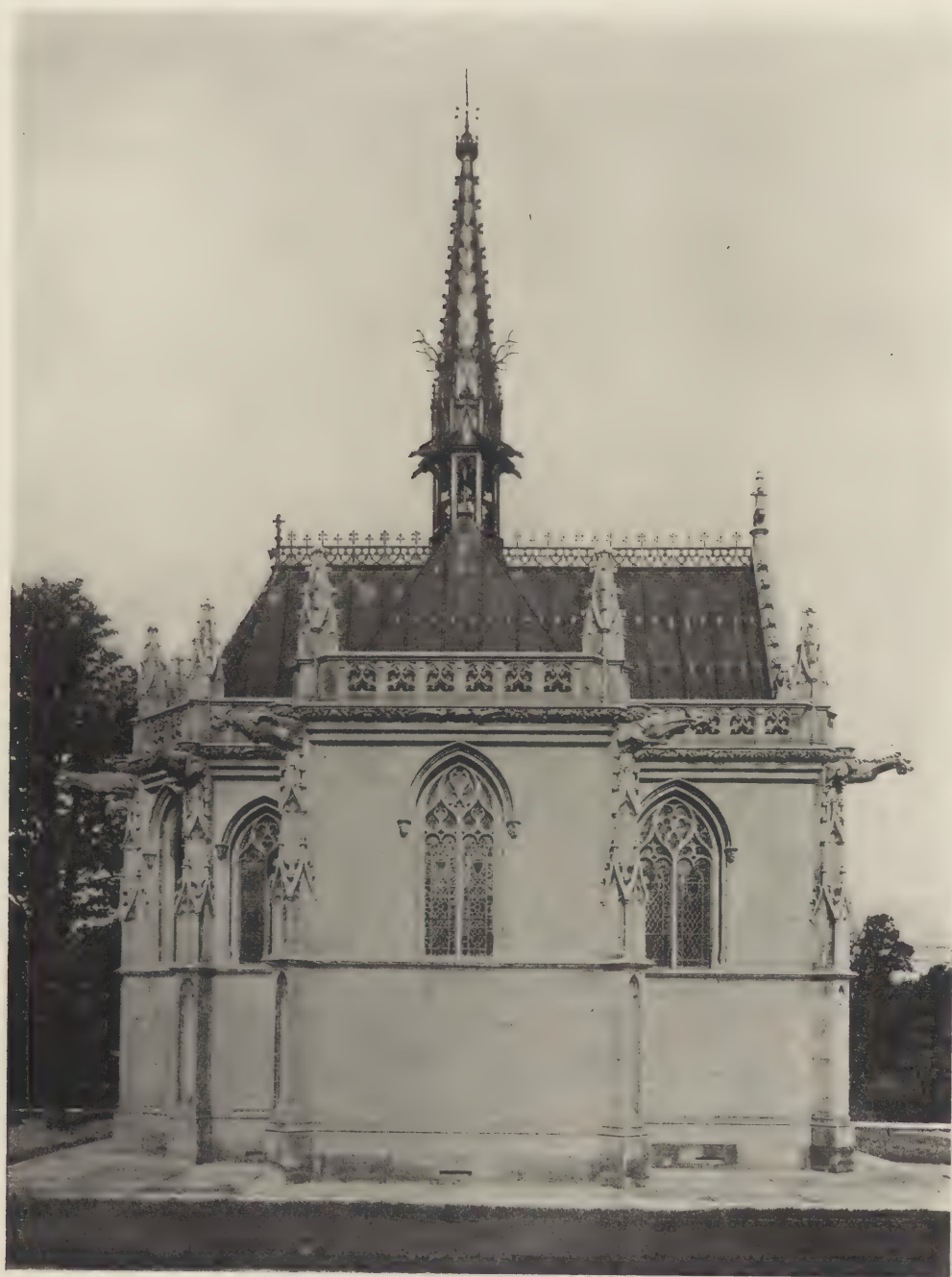
bit of colored glass over another, as in American windows of the last thirty years' revival of the art.

The design is painted directly on the plain surface of the glass. The ground colors are clear blue, red and white. Variety and richness are secured through gold stain and embossing. The shadows are painted in with dark colors.

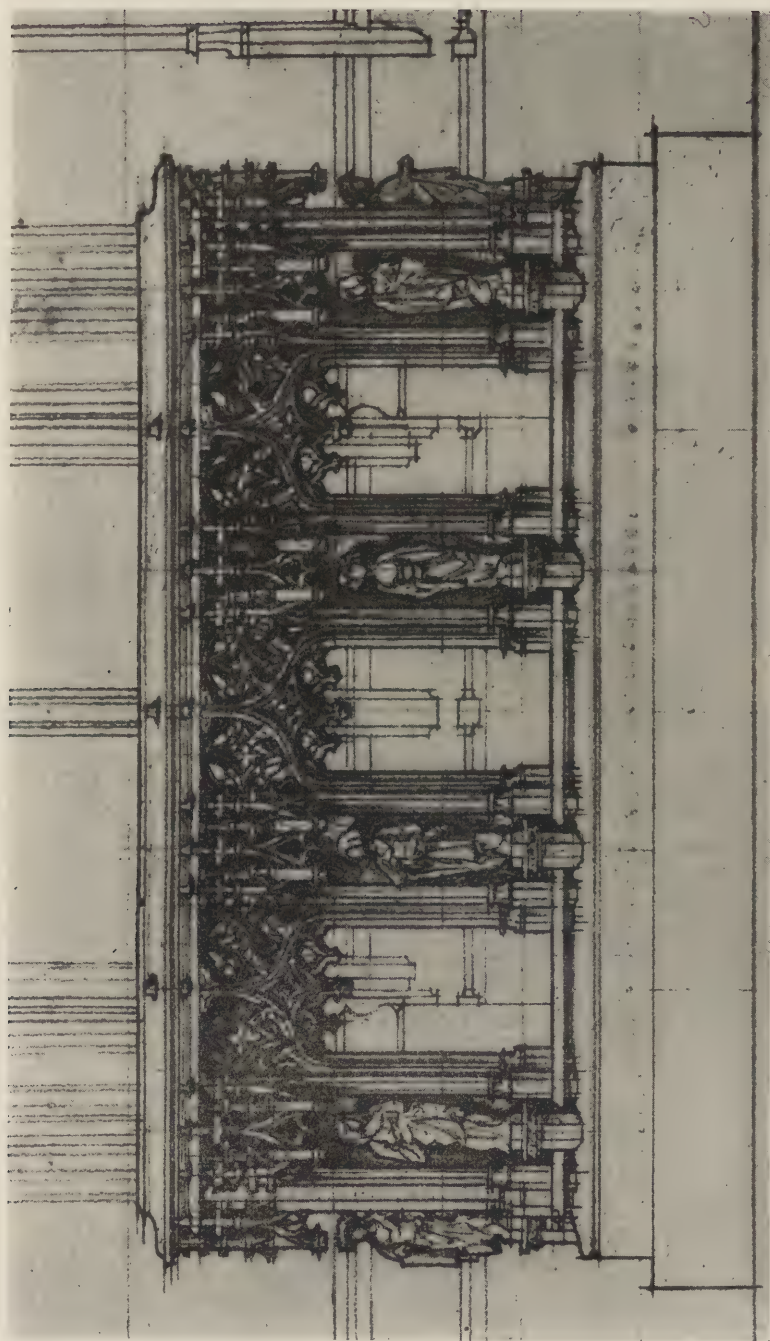
Infinite bits of glass are used—a veritable patchwork, whether from lack of larger pieces or deliberate intent upon the part of fifteenth century craftsmen is a mooted question. Where jewel effects are obtained in American stained-glass by piling up glass in globules, these mediæval windows attain their jewelled richness through embossing.



INTERIOR—MAUSOLEUM OF O. H. P.
BELMONT, ESQ., WOODLAWN, N. Y.
HUNT & HUNT, ARCHITECTS.



SIDE ELEVATION—MAUSOLEUM OF O. H. P.
BELMONT, ESQ., WOODLAWN, N. Y.
HUNT & HUNT, ARCHITECTS.



Scale— $\frac{1}{4}$ Inch = 1 Foot.

DRAWING FOR THE MARBLE ALTAR-TABLE, MAUSOLEUM OF O. H. P. BELMONT, ESQ., WOODLAWN, N. Y.
HUNT & HUNT, ARCHITECTS.

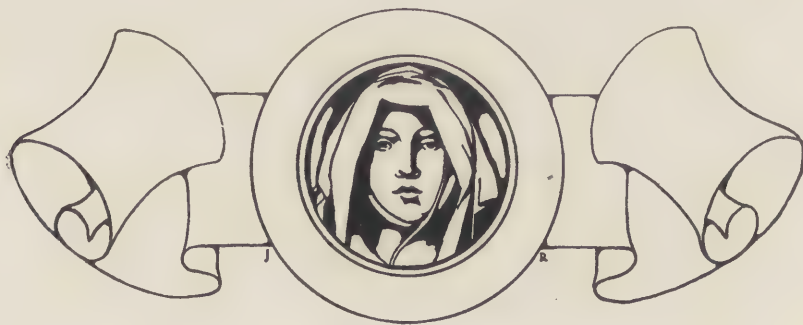
The whole surface of the glass is solidly covered in rich colors. Where in American glass the leading is of uniform thickness and follows the outline of figure, drapery or landscape, these fifteenth century windows reveal leads of varying size, from the scarcely visible wire to the veritable bar. They cross and recross, irrespective of outlines of the design.

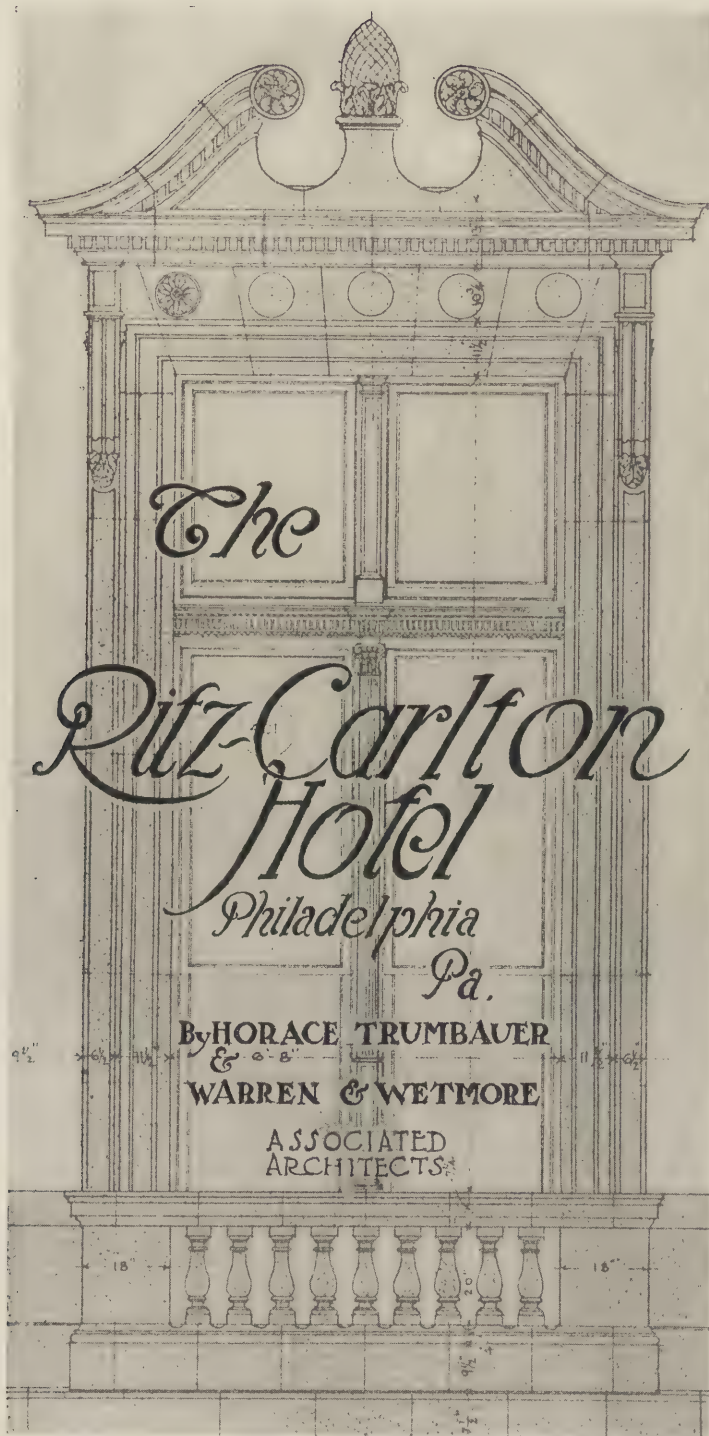
There are no figures in the side windows. The backgrounds are solid gray with bright colored borders. Within these borders are emblems. The tracery above all the windows are full of emblems and small symbolical figures with mediæval Latin mottoes from old missals.

The effect of the whole is a soothing mellow richness. Following the original plan of the architects, when the windows were in place, Mr. William Mackay was commissioned to convert the whole interior into its present archaic charm. How this miracle was wrought through Mr. Mackay's ingenious and original craftsmanship is explained in detail elsewhere. Time has literally been outwitted here, so complete has been the transformation—to eye and touch—of this twentieth century cement interior into a smoke-incensed, weather-stained, age-worn house of prayer.

Aside from the optical illusion, it promises the endurance of the limestone exterior. As the old Italian fresco painters were wont to go over leaf and flower, every detail of design, deepening a color here, lightening a shadow there, Mr. Mackay, with like sympathetic care and intelligence, has applied his aging process to every inch of wall and plastic decoration, subduing, mellowing, obliterating, simulating rain and weather stain leaks through roof, windows and door, until nowhere is there suggestion of the "newness" of a modern structure, while everywhere is the illusion of the fifteenth century masterpiece.

The first step towards the chapel's furnishing is an old-ivory marble altar table which will shortly be put in place. The table is four feet high and seven feet long. It is supported by twelve saints, elaborately carved out of the solid marble. In keeping with the mediæval Gothic color scheme of the whole interior, each apostle and detail of design will be painted after the style of the gorgeous "polychrome" work which is characteristic of a certain period of Gothic architecture, yet rarely associated with Gothic as a style. After it has been painted the table will be subjected to the aging process mentioned above, before falling for all time under the mellowing light of the fifteenth century windows.





The
Ritz Carlton
Hotel
Philadelphia
Pa.

By HORACE TRUMBAUER
& O. B.
WARREN & WETMORE

ASSOCIATED
ARCHITECTS



DETAIL OF BROAD STREET FACADE, RITZ-CARLTON HOTEL, PHILADELPHIA, PA.
HORACE TRUMBAUER, AND WARREN & WETMORE, ASSOCIATED ARCHITECTS.



THE RITZ-CARLTON HOTEL, PHILADELPHIA, PA. HORACE TRUMBauer AND WARREN & WETMORE, ASSOCIATED ARCHITECTS.



ENTRE-SALLE, THE RITZ-CARLTON HOTEL, PHILADELPHIA, PA. HORACE TRUMBAUER AND WARREN & WETMORE, ASSOCIATED ARCHITECTS.



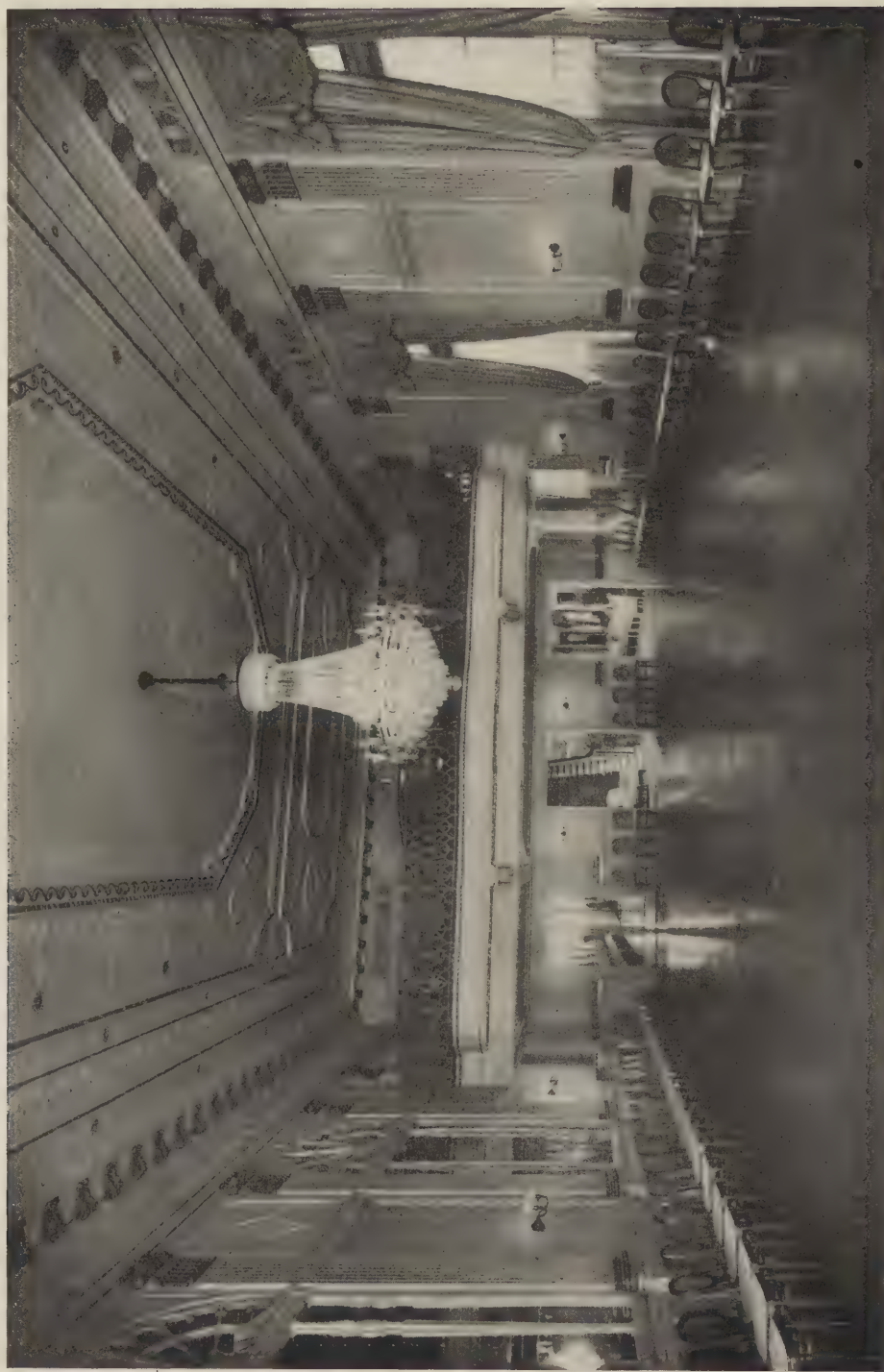
ENTRE-SALLE, THE RITZ-CARLTON HOTEL, PHILADELPHIA, PA. HORACE TRUMBAUER AND WARREN & WETMORE, ASSOCIATED ARCHITECTS.



THE MAIN DINING ROOM—THE RITZ-CARLTON HOTEL, PHILADELPHIA.
Horace Trumbauer and Warren & Wetmore, Associated Architects.



THE BROAD STREET ENTRANCE LOBBY, THE RITZ-CARLTON HOTEL, PHILADELPHIA, PA.
Horace Trumbauer and Warren & Wetmore, Associated Architects.



THE BALL-ROOM, THE RITZ-CARLTON HOTEL, PHILADELPHIA, PA.
HORACE TRUMBauer, AND WARREN & WETMORE, ASSOCIATED ARCHITECTS.



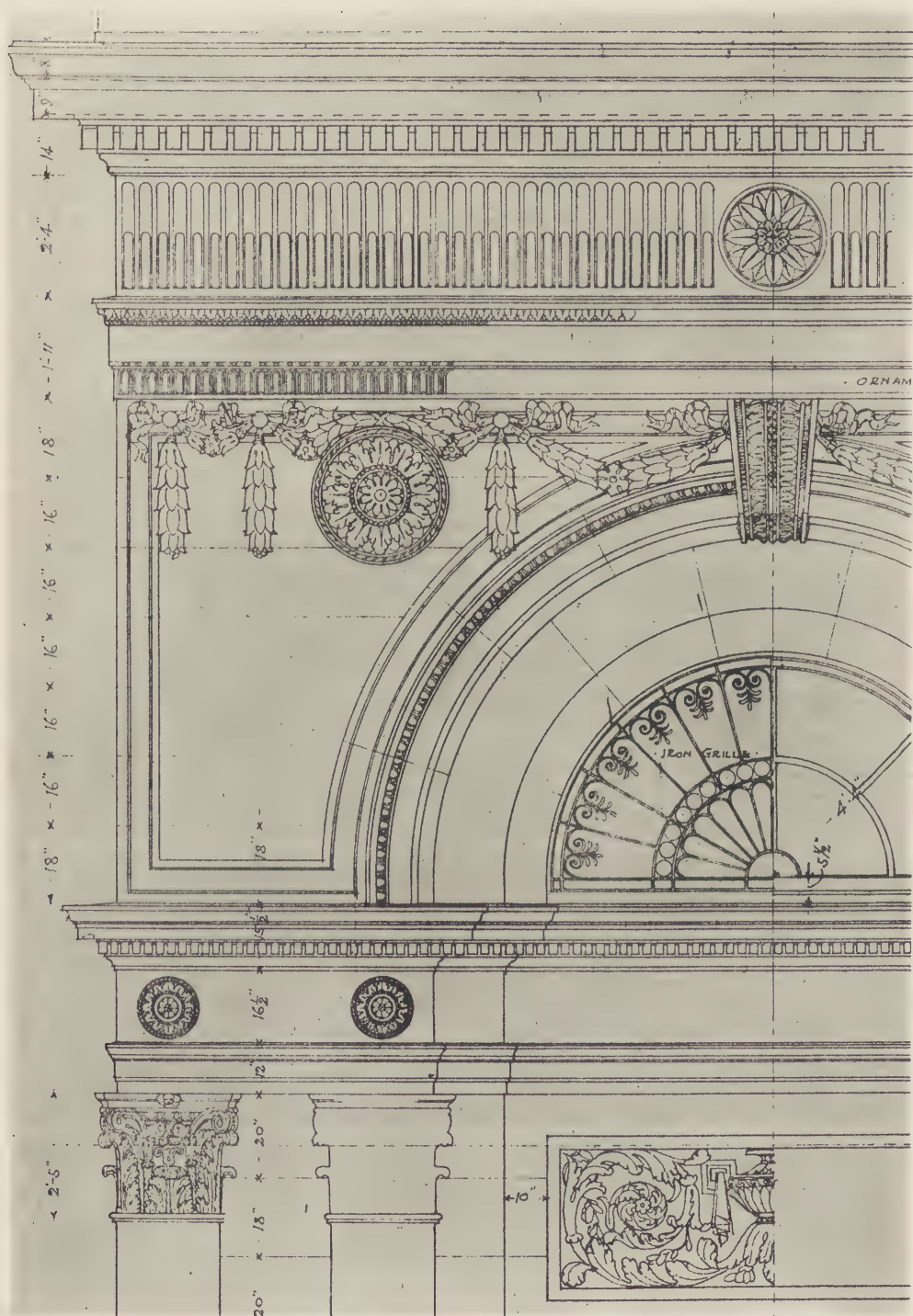
A LOBBY IN THE RITZ-CARLTON HOTEL, PHILADELPHIA, PA.
Horace Trumbauer, and Warren & Wetmore, Associated Architects.



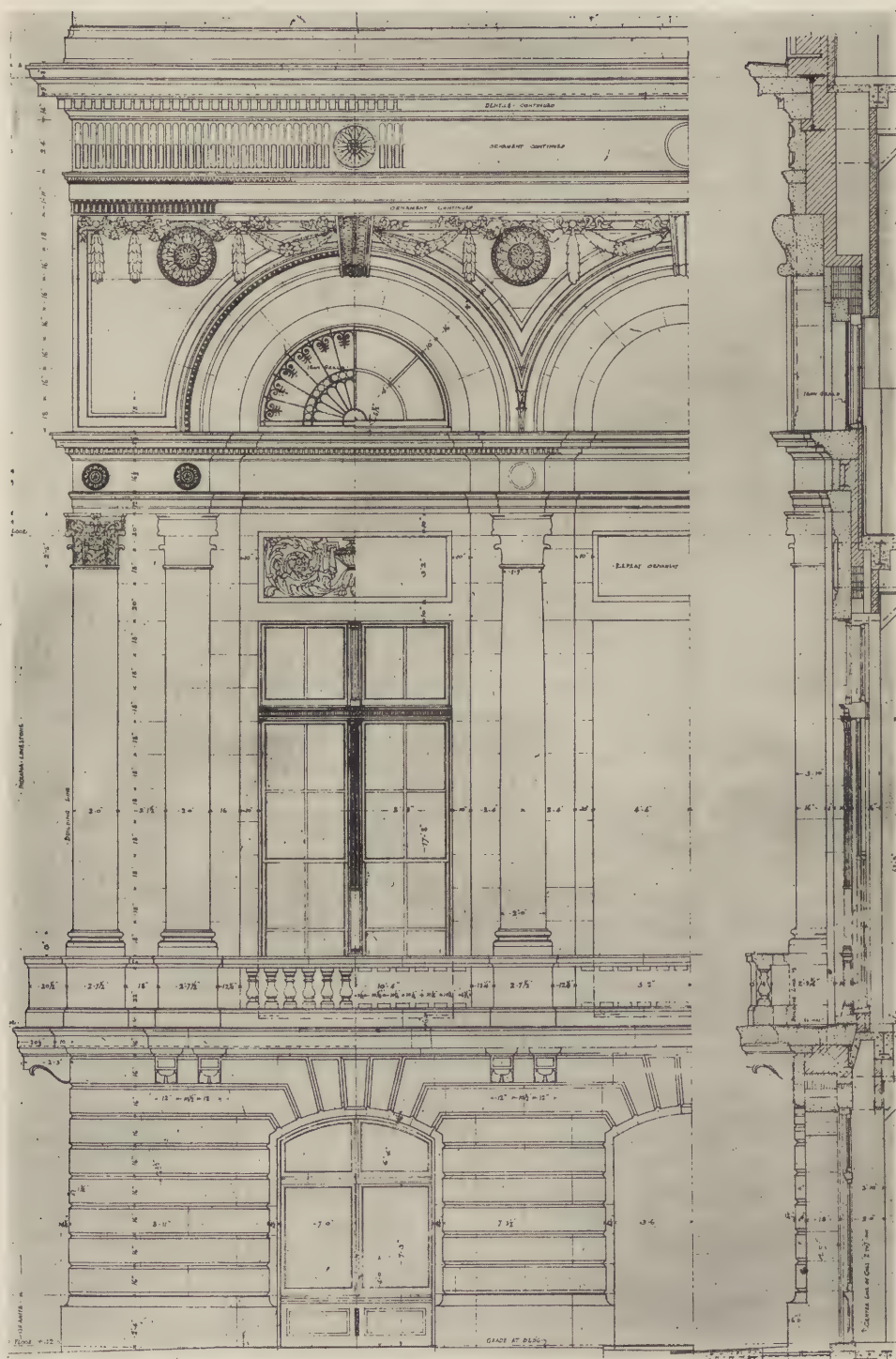
THE PARLOR OF A SUITE, THE RITZ-CARLTON HOTEL, PHILADELPHIA, PA.
Horace Trumbauer, and Warren & Wetmore, Associated Architects.



ARCHITECTS' DRAWING FOR THE ENLARGEMENT OF THE RITZ-CARLTON HOTEL, PHILADELPHIA, PA., HORACE TRUMBAUER AND WARREN & WETMORE, ASSOCIATED ARCHITECTS.



DETAIL, BROAD STREET ELEVATION, THE RITZ-CARLTON HOTEL, PHILADELPHIA. PA.
HORACE TRUMBAUER AND WARREN & WETMORE, ASSOCIATED ARCHITECTS



DETAIL DRAWING—FIRST TO THIRD FLOORS (ONE HALF AND SECTION OF THE BROAD ST. ELEVATION), THE RITZ-CARLTON HOTEL, PHILADELPHIA, PA. HORACE TRUMBAUER AND WARREN & WETMORE, ASSOCIATED ARCHITECTS.



DETAIL ON WALNUT STREET, THE RITZ-CARLTON HOTEL, PHILADELPHIA, PA. HORACE TRUMBAUER AND WARREN & WETMORE, ASSOCIATED ARCHITECTS.

Back of
Foldout
Not Imaged

* THE RITZ-CARLTON HOTEL * PHILADELPHIA, PA *
* EXTERIOR DETAILS, EAST HALF OF WALNUT ST. ELEVATION *

HORACE TEVMBAYER.
WARREN & WETMORE,
ARCHITECTS, ASSOCIATED

THIRD FLOOR

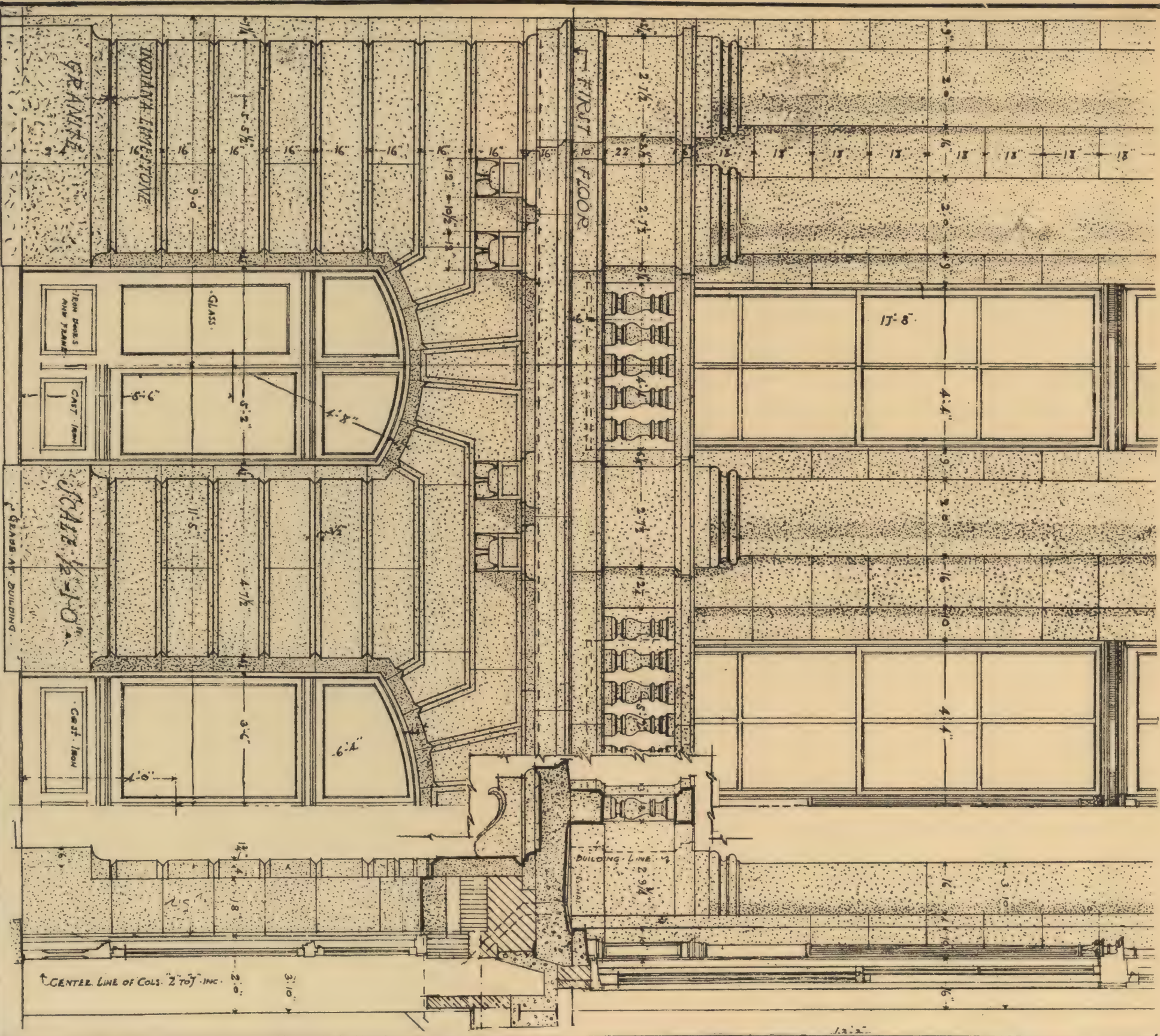
INDIANA LIMESTONE

SECOND FLOOR

• ४५१७ • ४३८५३८

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Foldout
Not Imaged

HOGE TRIMBLER
WARREN & WETMORE,
Associates & Affiliates





FOUR EARLY AMERICAN MANTELS

The following illustrations show four unusually interesting and excellent examples of the detail which characterized the last phase of Georgian architecture in this country. It is a type of the style which one discerning and careful critic has called "The Third Type of Georgian Architecture." The type which found for its inspiration a pronounced degree of influence from the work of the Brothers Adam, in England. It was the forerunner of the famous "Classic Revival," and shows a development far more scholarly than the earlier Georgian work—a quality of greater *finesse*, even if of less strength.

The mantels shown are from a residence known as the old Diller house, on South Queen Street, Lancaster, Pa., and though no historic data regarding the building are at hand, it is known to be considerably over a century old. The details are interesting for their consistency and their minor diversity in variations on a generally similar motive.

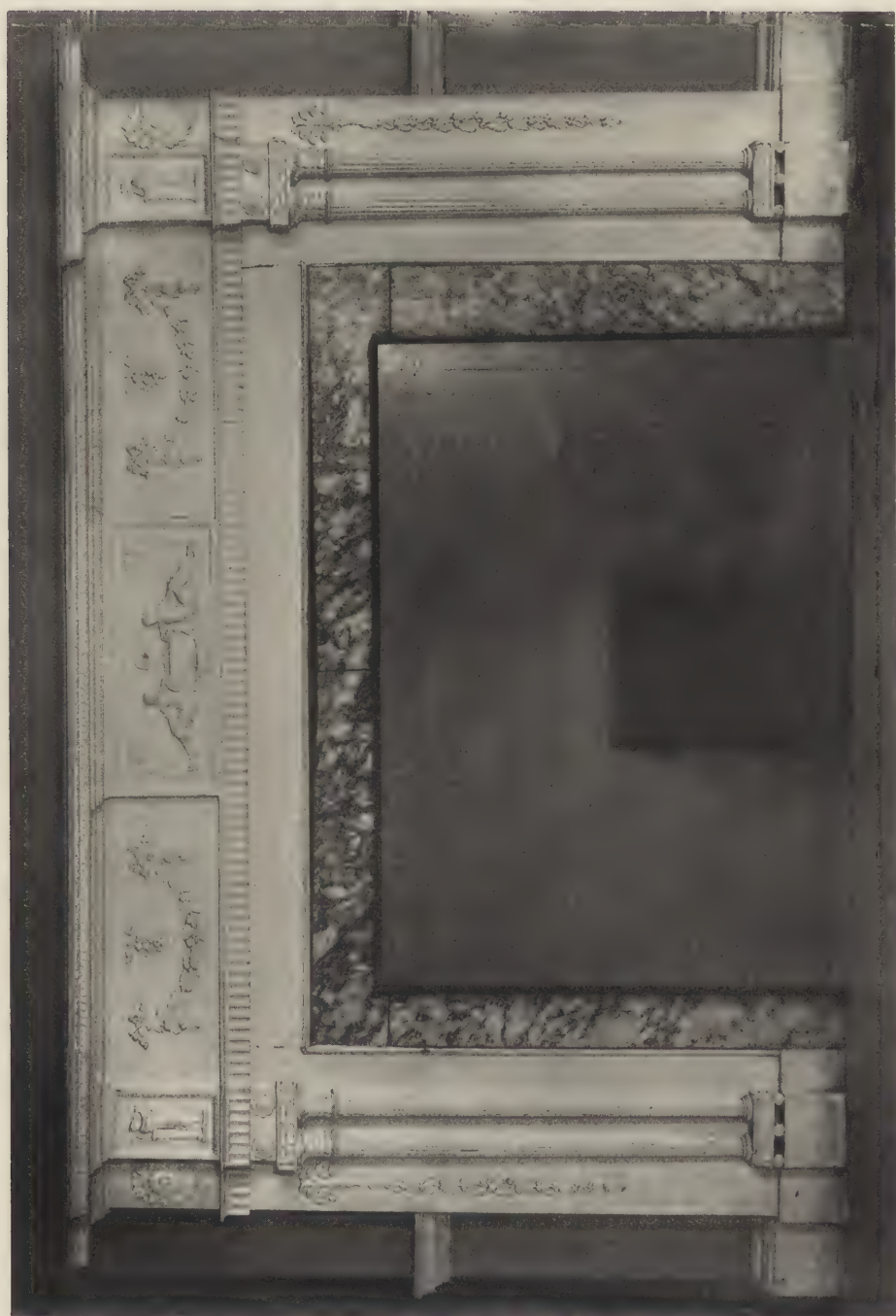
The photographs, by Darmstetter, of Lancaster, Pa., were received from Robert E. Williams, Architect, of Steelton, Pa.



A MANTEL FROM THE DILLER HOUSE, LANCASTER, PA.



A MANTEL FROM THE DIL-
LER HOUSE, LANCASTER, PA.



A MANTEL FROM THE DILLER HOUSE, LANCASTER, PA.



A MANTEL FROM THE DIL-
LER HOUSE, LANCASTER, PA.



DETAILS OF MANTELS FROM THE
DILLER HOUSE, LANCASTER, PA.
(See Pages 226 and 227.)



DETAILS OF MANTELS FROM THE
DILLER HOUSE, LANCASTER, PA.
(See Pages 228 and 229.)



W. H. L. H. H.

"STYLE IN AMERICAN ARCHITECTURE"*

AN ADDRESS BY RALPH ADAMS CRAM.



THE various followings in architecture to-day are so many and so manifest that he who runs may read, and, parenthetically, he who reads very certainly often runs—from some of the strange aberrations that beset his path.

I am minded there-

fore, in writing under the above title, to say less about style and styles and half a style, than of the impulse—or the impulses, for they are legion—behind them, and of the goal to which in devious ways they all are tending.

There is nothing accidental in our stylistic development, or in the universe, for that matter. There was once a very wise man who, on speaking of a miracle to a friend, and being confronted by the assertion that the event was not that but rather a coincidence, devoutly said that he thanked God he was not so superstitious as to believe in coincidences. So, chaotic and illogical as our devious wanderings after the strange gods of style may be, there are grounds for thinking that even here we may find evidences of design, of a Providence that overrules all things for good; "an idea," as Chesterton would say, "not without humor."

For chaos is the only word that one can justly apply to the quaint and inconsequent conceits in which we have indulged since that monumental moment in the early nineteenth century when, architecturally, all that had been since the beginning ceased, and that which had never been before on land or sea began. A walk up Fifth Avenue from Madison

Square to the Park, with one's eyes open, is an experience of some surprises, and equal illumination; and it leaves an indelible impression of that primal chaos that is certainly without form, if it is not wholly void. Here one may see in a scant two miles (scant, but how replete with experiences!), treasure-trove of all peoples and all generations: Roman temples and Parisian shops; Gothic of sorts (and out of sorts), from the "Carpenter-Gothic" of 1845, through Victorian of that ilk, to the most modern and competent recasting of ancient forms and restored ideals; Venetian palaces, and Louis Seize palaces, and Roman palaces, and more palaces from wherever palaces were ever built; delicate little Georgian ghosts, shrinking in their unpremeditated contact with Babylonian skyscrapers that poise their towering masses of plausible masonry on an unconvincing sub-structure of plate glass. And it is all contemporary—the oldest of it dates back not two generations; while it is all wildly and improbably different.

The experience prompts retrospection, and we turn over the dog-eared leaves of the immediate past. Apparently it was the same, only less so, back to the decade between 1820 and 1830, and there we find a reasonably firm foothold. Here at last, at the beginning of the century, we discover actual unanimity, and with some relief we go back century after century, tracing variations, but discovering no precedent for the chaos we have left. From time to time, even to the first Olympiad, we suddenly find ourselves at some brief period where a fight is manifestly going on, but there were never more than two parts to the contest, and this once passed, we have another four or five centuries of peaceful and unified development. Our own Colonial merges without a shock in English Georgian; this,

*This paper is based upon an address before the Contemporary Club of Philadelphia, reprinted through courtesy of the Yale Review, July, 1913.

through Inigo Jones, in the Renaissance of the Continent. A generation of warfare lands us in Flamboyant Gothic, and so to real Gothic, that stretches back through logical vicissitudes to the twelfth century. Another upheaval, and in a moment we are with the Romanesque that touches Rome itself—and behind lies Hellas. No chaos here; definite and lawful development; infinite variety, infinite personality, and a vitality that demands a more illimitable word than "infinite." What happened, then, in 1825, what is happening now, what is going to happen, and why?

We all know what our own Colonial was like; perhaps we do not fully realize how varied it was as between one section and another, but at least we appreciate its simplicity and directness, its honesty, its native refinement and delicacy, its frequent originality. It isn't the same as English Georgian; sometimes it is distinctly better, and, however humble or colloquial, it is marked always by extreme good taste. If anything, it improved during the almost two centuries of Colonial growth, and when the nineteenth century opened it was still instinct with life. A half-century later where were we? Remember 1850, and all that date connotes of structural dishonesty, stylistic barbarism, and general ugliness! Here is the debatable period, and we may narrow it; for in 1810 and in 1820, good work was still being done, while in 1840, yes, in 1830, the sodden savagery diluted with shameless artifice was widely prevalent. To me, this decade between 1820 and 1830 is one of the great moments in architectural history, for then the last flicker of instinctive art amongst men died away, and a new period came in. Such a thing had never happened before; it is true Rome never matched Greece in perfection of art; the Dark Ages after her fall were dark indeed; the second Dark Ages after the death of Charlemagne were equally black; while the transition from Gothic to Renaissance was not without elements of disappointment; but at none of these transitional moments were people absolutely wrong-headed, never was the work of their hands positively disgraceful. Even now we put

their poor products in our art museums, where they are not outfaced by the splendid monuments of the great and crescent epochs. In a word, what happened about 1825 was anomalous; it happened for the first time; and for the first time whatever man tried to do in art was not only wrong, it was absolutely and unescapably bad.

I should like to deal with this matter in detail, but the labor would prolong itself unduly. Briefly, what happened was, it seems to me, this. The Renaissance had struck a wrong note—and in several things besides architecture: for the first time man self-confidently set to work to invent and popularize a new and perfectly artificial style. I am not concerned here with the question whether it was a good style or not, the point is that it was done with malice aforethought; it was invented by a cabal of painters, goldsmiths, scenic artists, and literary men, and railroaded through a stunned society that, busied with other matters, took what was offered it, abandoned its old native ways, and later, when time for thought offered, found it was too late to go back. Outside Italy there was at first as little desire for the new-fangled mode as there was for the doctrinal Reformation outside Germany. In France and England good taste still reigned supreme, and though the dogmatic iconoclasts took good care that the best of the old work should be destroyed, and that suspicion should be cast on what—from sheer exhaustion—they allowed to remain, though for one reason and another the new Classic style came in, the good taste of the people still remained operative, and while Italy and Germany were mired in Rococo and Baroque, they continued building lovely things that were good in spite of their artificial style, because their people had not yet lost their senses or their taste.

It could not last, however; certain essential elements had been lost out of life during the Renaissance and the Reformation; the Revolution—third act in the great melodrama—was a foregone conclusion; it completed the working out of the foreordained plot, and after it was over and the curtain had been rung down,

whatever had been won, good taste had been lost, and remained only the memory of a thing that had been born with man's civilization and had accompanied it until that time.

Alberti and Palladio and Inigo Jones had dissolved and disappeared in the slim refinements of American Colonial. What followed? For a brief time, and in one or two categories of activity, the spacious and delusive imitations that Jefferson more or less popularized, the style sometimes known as neo-Grec, but more accurately termed—because of its wide use for Protestant meeting-houses in country districts—the Greco-Baptist style. It cannot be mistaken: front porticoes of well-designed, four-foot Classical columns made of seven-eighths inch pine stock neatly nailed together, painted white, and echoing like a drum to the incautious kick of the heel; slab sides covered with clapboards, green blinds to the round-topped windows, and a little bit of a brick chimney sticking up at the stern where once, in happier days, stood the little cote that housed the Sanctus bell.

Then came what is well called " Carpenter-Gothic," marked by the same high indifference to structural integrity, and with even less reliance on precedent for its architectural forms; a perfectly awful farrago of libellous details—pointed arches, clustered columns, buttresses, parapets, pinnacles—and all of the ever-present pine lumber painted gray, and usually sanded as a final refinement of verisimilitude. And with these wonderful monuments, cheek by jowl, Italian villas, very white and much balconied. Swiss chalets, and every other imaginable thing that the immortal Batty Langley, or later the admirable Mr. Downing could invent, with, for evidence of sterling American ingenuity, the "jig-saw-and-batten" refinement of crime. We really could not be expected to stand all this, and when the Centennial finally revealed us as, architecturally speaking, the most savage of nations, we began to look about for means of amendment. We were not strikingly successful, as is evidenced by the so-called "Queen Anne" and "Eastlake" products of the morning after

the celebration; but the Ruskinian leaven was working, and a group of men did attempt to produce something that at least had some vestiges of thought behind it. It is generally considered very awful indeed—and so it is, but it was the first sincere and enthusiastic work for generations, and demands a word of recognition. Its vivid ugliness is due to the fact that in the space of seventy-five years the last, faintest flicker of sense of beauty had vanished from the American citizen; its intensity of purpose bears witness to the sincerity of the men who did it, and I for one would give them praise, not blame.

We are approaching—in our review—another era in the development of our architecture: let us gather up the many strands in preparation therefor. Here are the "wild and whirling words" of Hunt, Eidlitz, Furness; here is the grave old Gothic of Upjohn's following, Renwick, Congdon, Haight; admirable, much of it, especially in little country churches; here is the Ruskinian fold, Cummings, Sturgis, Cabot—rather Bostonian you will note; here is the old Classical tradition that had slipped very, very far from the standards of Thornton, Bulfinch, McComb, now flaring luridly in the appalling forms of Mullet's Government buildings and the Philadelphia City Hall. Let us pursue the subject no further; there are others, but let them be nameless; we have enough to indicate a condition of some complexity and a certain lack of conviction, or even racial unity. Then the Event occurred, and its name was H. H. Richardson. The first great genius in American architecture, he rolled like an æsthetic Juggernaut over the prostrate bodies of his peers and the public, and in ten years we *did* have substantial unity. We were like the village fisherman who didn't care what color they painted the old tub, "so as they painted her red"; we didn't care what our architecture was, so long as it was Romanesque. For another ten years we had a love-feast of cavernous arches, quarry-faced ashlar, cyclopean voussoirs, and seaweed decoration; village schools, railway stations, cottages—all, all were of the sacrosanct style of certain rather barba-

rous peoples in the south of France at the close of the Dark Ages.

And in another ten years Richardson was dead, and his style, which had followed the course of empire to the prairies and the alkali lands and the lands beyond the Sierras; and a few years ago I found some of it in Japan! It was splendid, and it was compelling, as its discoverer handled it; but it was alien, artificial, and impossible, equally with the bad things it displaced. But it *did* displace them, and Richardson will be remembered, not as the discoverer of a new style, but as the man who made architecture a living art once more.

Eighteen hundred and ninety, and we start again. Two tendencies are clear and explicit. A new and revived Classic with McKim as its protagonist, and a new Gothic. The first splits up at once into three lines of development: pure Classic, Beaux Arts, and Colonial, each vital, brilliant, and beautiful in varying degrees. The second was, and remains, more or less one, a taking over of the late Gothic of England and prolonging it into new fields, sometimes into new beauties. So matters run on for another ten years; at the end of that time the pure Classic has won new laurels for its clean and scholarly beauty, the Beaux Arts following has abandoned most of its banality of French bad taste and has become better than the best contemporary work in France, while the neo-Colonial has developed into a living thing of exquisite charm. I feel too near the Gothic development to speak of it without prejudice, but its advance has been no less than that of its Classical rival—or should I say, bedfellow?

And now two new elements enter: steel-frame construction on the one hand, and on the other the Secessionist. The steel frame is the *enfant terrible* of architecture, but like so many of the genius it may grow up to be a serious-minded citizen and a good father. It isn't that now, it is a menace, not only to architecture, but to society; but it is young and it is having its fling. If we can make it realize that it is a new force, not a substitute, we shall do well. When it contents itself in its own sphere, and the municipality

says kindly and firmly, "thus far and no further"—the "thus far" being about one hundred and twenty-five feet above street level, as in the very wise town of Boston—then it may be a good servant. Like all good servants it makes the worst possible master; and when it claims as its chiefest virtue that it enables us to reproduce the Baths of Caracalla, vaults and all, at half the price, or build a second Chartres Cathedral with no danger from thrusting arches, and with flying buttresses that may be content beautifully to exist, since they will have no other work to do, then it is time to call a halt.

The Secessionist—one might sometimes call him Post-Impressionist, Cubist even—is the latest element to be introduced, and in some ways he is the most interesting. Unlike his *confrères* in Germany, Spain, and Scandinavia, he shows himself little except in minor domestic work—for at heart we are a conservative race, whatever individuals may be—but here he is stimulating. His habitat seems to be Chicago and the Pacific coast; his governing conviction a strongly developed enmity to archaeological forms of any kind. Some of the little houses of the Middle West are striking, quite novel, and inordinately clever; some of the work on the Pacific coast, particularly around Pasadena, is exquisite, no less. Personally, I don't believe it is possible wholly to sever oneself from the past, its forms and expression; and it certainly would be undesirable; on the other hand, the astute archæology of some of our best modern work, whether Classic or Gothic, is stupefying and leads nowhere. Out of the interplay of these two tendencies, much of value may arise.

And there you are: three kinds of Classic, two kinds of Gothic, skeleton-frame, and Secessionist—all are operative to-day, each with its own strong following, each, one admits, consummately clever and improving every day; for there is no architectural retrogression in America, there is steady and startling advance, not only in facility for handling and developing styles, but in that far more important affair, recognition of the fact that styles matter far less than style. From a purely professional standpoint

the most encouraging thing is the breadth of culture, the philosophical insight into the essence of things, the liberality of judgment that mark so many of the architectural profession to-day. Gone are the old days of the "Battle of the Styles"; the swords are beaten into pruning-hooks, and these are being used very efficiently in clearing away the thicket of superstitions and prejudices that for so long choked the struggling flower of sound artistic development. The Goth and the Pagan can now meet safely in street or drawing-room without danger of acute disorder; even the structural engineer and the artist preserve the peace (in public); for all have found out that architecture is much bigger than its forms, that the fundamental laws are the same for all good styles, and that the things that count are structural integrity, good taste, restraint, vision, and significance. No one now would claim with the clangor of trumpets that the day of victory was about to dawn for the Beaux Arts, Gothic, or steel-frame styles, or for any other, for that matter; each is contributing something to the mysterious alembic we are brewing; and all we hope is that out of it may come the philosopher's stone that, touching inert matter, shall turn it into refined gold—which by the way is the proper function of architecture and of all the arts.

Chaos then confronts us, in that there is no single architectural following, but legion; and in that fact lies the honor of our art, for neither is society one, or ever at one with itself. This is one of those great five-hundred year periods of boiling activity, one of those nodes that periodically divide the vast vibrations of history, when all things are in flux, when all that has been for four centuries is plunging downward in disintegration, while all that shall be for another equal period is surging upward towards its culmination. Architecture is nothing unless it is intimately expressive, and if utterly different things clamor for voicing, different also must be their architectural manifestation. You can't build a Roman Catholic or Episcopal church in the Beaux Arts vernacular (it has been done, but it is extremely silly) be-

cause the Church is the eternal and fundamentally immutable thing in a world of change and novelty and experiment; and it has to express this quality through the connotation of the forms it developed through a thousand years to voice the fullness of its genius that was developing simultaneously. Neither can you use the steel-frame or reinforced concrete to the same ends, though this very sordid wickedness has also been perpetrated, I have grounds for believing. On the other hand, think of using the consummate art of Chartres Cathedral for a railway terminal, or the Sainte Chapelle for a stock exchange, or Haddon Hall for an Atlantic City hotel, or the Ducal Palace in Venice for a department store, or the Erechtheum for a fire-engine house. The case has merely to be stated to be given leave to withdraw, and with it goes, for the time, the talk we once heard of an "American Style." Styles come from unity of impulse; styles come from a just and universal estimate of comparative values; styles come where there is the all-developing influence and the vivid stimulus of a clear and explicit and compelling religious faith; and these occur, not at the moment of wild confusion when one epoch of five centuries is yielding to another, but after the change in dynasty has been effected, and the new era begins its ascending course. The only premeditated architecture I know, the only style that was deliberately devised and worked out according to preconceived ideas, the style of the Renaissance, was yet not half so artificial as it looks (and as some of us would like to think), for in a sense it was inevitable, granting the postulates of the humanists and the flimsy dogmas of the materialists of the sixteenth century. It did not develop insensibly and instinctively like Hellenic and Byzantine and Gothic and Chinese Buddhist art—the really great arts in history—but once the great parabola of mediæval civilization curved downward to its end, once Constantinople fell, something of the sort was not to be escaped.

Now I do not feel that we shall be content with an art of the scope of that

of the Renaissance; I do not feel that we shall be content with a new epoch of civilization on Renaissance lines. There are better ways of life, and saner. I believe all the wonderful new forces now working hiddenly, or revealing themselves sporadically, will assemble to a new synthesis that will have issue in a great epoch of civilization as unified as ours is disunited, as centripetal as ours is centrifugal, as spiritually efficient as ours is materially efficient; and that then will come, and come naturally and insensibly, the inevitable art that will be glorious and great, because it shows forth a national character, a national life that also is great and glorious.

Reduced to its simplest terms, American architecture is seen to have had two epochs. First, the attempted conservation of a definite style (which, whatever its genesis, had become an essential part of our racial character), and its complete disappearance exactly at the time when the serious and conservative nature of the people of the United States gave place, with almost equal suddenness, to a new quality born partly of political independence, partly of new and stimulating natural conditions, partly of the backwash from Continental revolution, and above all of the swift working out, at last, of powers latent in the Renaissance-Reformation itself. Second, the confused activities of many men of many minds, who had cut loose from tradition become moribund. Communal interests, the sense of solidarity, inherited from the Middle Ages and persisting in strange new forms even through the Renaissance epoch itself, had yielded to a crescent individualism, and architecture, like a good art, followed close to heel.

This is really all there is to our architectural history, and I have used many words in saying what might have been expressed in a sentence. What lies before us? More pigeon-holes, more personal followings, more individualism, with anarchy at the end? I do not think so, but rather exactly the reverse. Architecture is always expressive; sometimes it reveals metaphysical and biological truth, when in itself there is no

truth whatever. If we built Independence Hall in Philadelphia, there was something in us of the same nature, and we glory in the fact. If we built the City Hall in the same town, there was something in us like that, arresting as the thought must be. If we are doing three Classics, and two Gothics, and steel-frame, and Post-Impressionism (not to mention the others) at the present moment, then that is because our nature is the same. Now, can we again prove the truth of the saying, "Ex pede Herculem," and, using our present output as the foot (one admits the connotation is of the centipede), create the Hercules? I mean, can we, from what we are doing to-day, predict anything of the future? Not of our future style—that will be what our society makes it; but of society itself. For my own part I think we can; for all that we are doing in architecture indicates the accuracy of the deduction we draw from myriad other manifestations, namely, that we are at the end of an epoch of materialism, rationalism, and intellectualism, and at the beginning of a wonderful new epoch, when once more we shall achieve a just estimate of comparative values, when material achievement becomes the slave again, and no longer the slave driver, when spiritual intuition drives mere intellect back into its proper and very circumscribed sphere, and when religion, at the same time dogmatic, sacramental, and mystic, becomes, in the ancient and sounding phrase, "One, Holy, Catholic, and Apostolic," and assumes again its rightful place as the supreme element in life and action, the golden chain on which are strung, and by which are bound together, the varied jewels of action.

Everywhere, and at the very moment when our material activity and our material triumphs seem to threaten the high stars, appear the evidences that this wonderful thing is coming to pass, and architecture adds its modicum of proof. What else does it mean that on every hand men now demand in art better things than ever before, and get them, from an increasing number of men, whether they are Pagans, Goths, or Van-

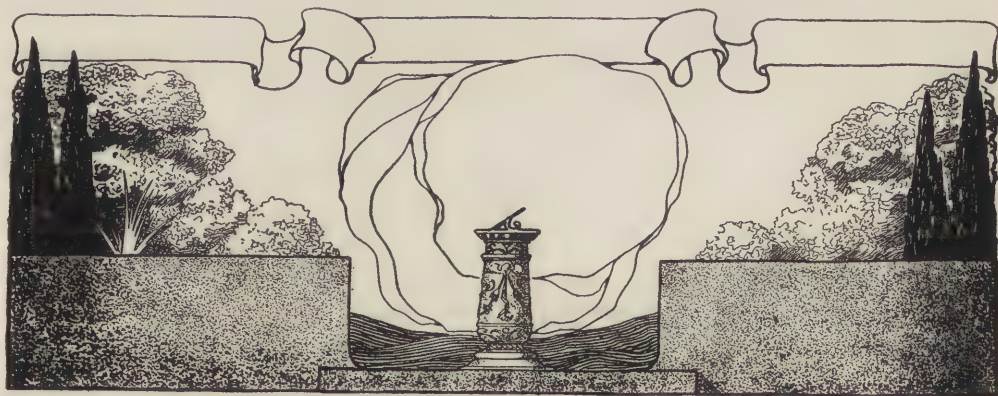
dals? What is the meaning of the return to Gothic, not only in form, but "in spirit and in truth"? Is it that we are pleased with these forms and wearied of others? Not at all. It is simply this, that the Renaissance-Reformation-Revolution having run its course, and its epoch having reached its appointed term, we go back, deliberately or instinctively, as life goes back, as history goes back, to restore something of the antecedent epoch, to win back something we have lost, to return to the fork in the roads, to gain again the old lamps we credulously bartered for new. Men laugh—or did, they have given it over of late—at what they call the reactionary nature and the affectation of the Gothic restoration of the moment, and they would be right if it meant what they think it means. Its significance is higher than their estimate, higher than the conscious impulses of those who are furthering the work; for back of it all lies the fact that what we need to-day in our society, in the State, in the Church, is precisely what we abandoned when, as one man, we arose to the cry of the leaders and abettors of the Renaissance. We lost much, but we gained much; now the time has come for us to conserve all that we gained of good, slough off the rest, and then gather up again the priceless heritage of mediævalism, so long disregarded to our pain and loss.

Shall we rest there? Shall we restore a style, and a way of life, and a

mode of thought? Shall we re-create an amorphous mediævalism and live listlessly in that fool's paradise? On the contrary. When a man finds himself confronting a narrow stream, with no bridge in sight, does he leap convulsively on the very brink and then project himself into space? If he does he is very apt to fail of his immediate object—which is to get across. No; he retraces his steps, gains his running start, and clears the obstacle at a bound. This is what we architects are doing when we fall back on the great past for our inspiration; this is what, specifically, the Gothicists are particularly doing. We are getting our running start, we are retracing our steps to the great Christian Middle Ages, not that there we may remain, but that we may achieve an adequate point of departure; what follows must take care of itself.

And in following this course we are not alone; we have life with us; for at last life also is going backward, back to gather up the golden apples lost in the wild race for prizes of another sort, back for its running start, that it may clear the crevasse that startlingly has opened before it. Beyond this chasm lies a new field, and a fair field, and it is ours if we will.

The night has darkened, but lightened towards dawn; there is silver on the edges of the hills and promise of a new day, not only for architects, but for every man.





HOUSES ON CHESHEIM VALLEY DRIVE ("QUAD-
RUPLÉ" TO LEFT), CHESTNUT HILL, PA., DUH-
RING, OKIE & ZIEGLER, ARCHITECTS.



A VIEW OF BENEZET ST., CHESTNUT HILL, PA.
Duhring, Okie & Ziegler, Architects.

ARCHITECTURE AND THE HOUSING PROBLEM

RECENT WORK BY DUHRING

OKIE & ZIEGLER

BY C. MATLACK PRICE

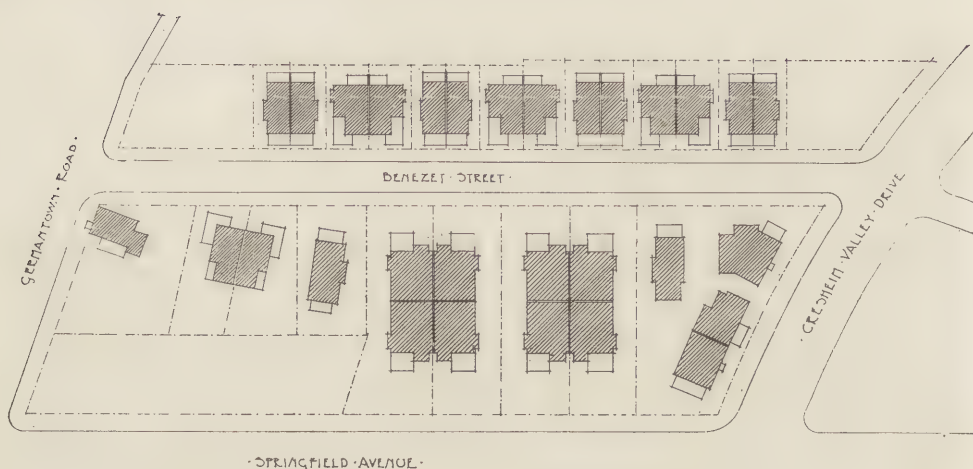


It has long since been demonstrated not only by architects, but even by speculative builders, that "ready-made houses," or houses erected in quantities for the development of a tract of real estate, need not necessarily be entirely devoid of architectural qualities. It must be said, however, that most achievements in this direction are to be summarized in a somewhat negative manner. They were not actually offensive, but fell far short of those qualities of architectural nicety which one had like to have seen.

Such special developments of architecture, however, must undergo certain phases of evolution, and this type—"the ready-made house," by reason of remain-

ing until very recently entirely in the hands of the speculative builder, has not by any means kept pace with other architectural achievements in this country. It would not appear to have occurred to the builder that a group of thoroughly attractive houses (even at the cost of a slightly greater initial investment) might pay a higher and more lasting interest than another group which, if it did not actually repel, could not, by the wildest flight of imagination, be called tempting to the prospective tenant.

In a suburban tract known as Chestnut Hill, however, near Philadelphia, the happy collusion of a far-sighted real-estate owner and a clever and conscientious architectural firm, has resulted in the erection of a group of small houses, detached, semi-detached, and "quadruple," presenting not only a thoroughly pleasing and alluring architectural aspect in



A BLOCK PLAN SHOWING THE DISPOSITION OF THE QUADRUPLE, "TWIN" AND SINGLE HOUSES, CHESTNUT HILL, PA.
Duhring, Okie & Ziegler, Architects.

themselves, but creating as well so instant a demand as to occasion a "waiting list" of prospective tenants.

A discussion of the latter phase of the question, written by the owner, appears in a part of an article on this housing development in the July (1913) issue of the *ARCHITECTURAL RECORD*, with illustrations of the "quadruple" houses mentioned above, and it is the purpose of

this article to illustrate the "twin," or semi-detached houses in the same group (shown in the block plan on this page), as well as to enlarge upon some others, and more general aspects of the subject.

It was said above that certain achievements in the housing problem have shown that the "ready-made" house need not be utterly wretched from standpoints structural and esthetic, but it has been left to



DOUBLE HOUSES ON BENEZET ST., CHESTNUT HILL, PA.
Duhring, Okie & Ziegler, Architects.



HOUSES ON CRESHEIM VALLEY DRIVE, CHESTNUT HILL, PA.
Duhring, Okie and Ziegler, Architects.



HOUSES ON CRESHEIM VALLEY ROAD, CHESTNUT HILL, PA.
Duhring, Okie and Ziegler, Architects.



A DOUBLE HOUSE ON BENEZET ST. (REMODELLED FROM AN OLD BARN),
CHESTNUT HILL, PA.



AN OLD HOUSE REMODELLED, NO. 7921 GERMANTOWN ROAD, CHESTNUT HILL, PA.
Duhring, Okie and Ziegler, Architects.

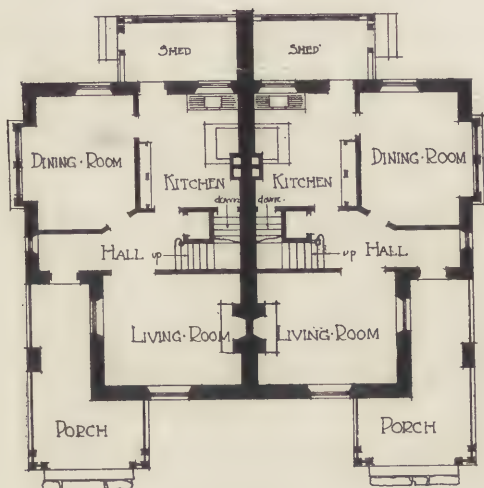


PORCH DETAIL—DOUBLE HOUSE ON BENEZET ST., CHESTNUT HILL, PA.
 Duhring, Okie & Ziegler, Architects.

the Philadelphia firm of Duhring, Okie & Ziegler to demonstrate that this type of house may even be made remarkably attractive. A certain part of the success of this demonstration may be due to the general prevailing expression of domesticity given by nearly all the Philadelphia architects to their rendering of residential architecture. In no part of the country is to be noted such consistency in country and suburban house design as obtains in and around Philadelphia.

That a group of severally intangible but collectively potent qualities of domesticity should be expressed in a given house for a given individual is by no means remarkable, but that these qualities should be effectively imparted to the houses on a real-estate development is eminently worthy of note and commendation.

While the several houses built upon this Chestnut Hill tract in the suburbs of Philadelphia possess in themselves a



First Floor Plan.
TWIN HOUSES ON BENEZET ST., CHESTNUT
HILL, PA.
Duhring, Okie & Ziegler, Architects.

certain individuality, they give at the same time a distinct impression of consistency and unity in intent.

The houses on Cresheim Valley Road illustrate this point in the clever diversity of their arrangement. The entrance is on the gable end of one, but on the front of the next, though both are similarly detailed. From the fieldstone and half-timber of the adjacent "quadruple house" there is a pleasant transition to the "rough-cast" stucco exterior of the double house which gives place, in a manner by no means distracting to the eye, to the all-fieldstone exterior of the next.

Along Benezet Street there is a certain uniformity without monotony—the architects have shown that a little study and a few changes in their drawings for the exteriors may produce that happy diversity which alone can save a row from its too-usual tiresome repetition of one idea.

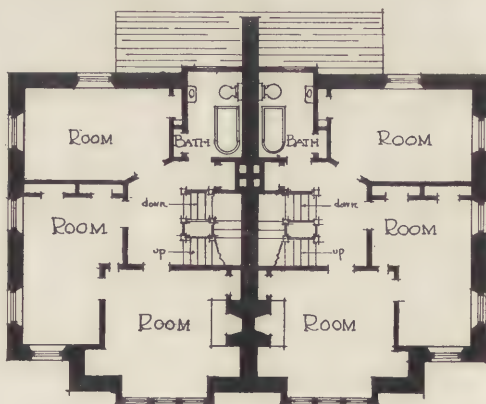
It is interesting to note the simple nature not only of the actual materials used, but also of the detail of the several parts. There are no stock ideas—no carpenters' scroll-saw "ginger-bread"—and certainly no shoddy construction and no suggestion that six houses, if done in a hurry, may be erected for the cost of one built carefully.

Perhaps the type of architecture exemplified by this recent suburban work by Duhring, Okie and Ziegler would not find favor outside the immediate vicinity of Philadelphia. This, however, is to be attributed to a quality of a sane architectural taste which the locality enjoys in contrast to the too-diverse inspirations of so many other suburban places. The Philadelphians revere local precedent in architectural ideals, and, knowing a good thing when they see it, have not found it advisable to experiment in a dozen non-indigenous styles.

In the architectural good taste prevalent in and about Philadelphia is to be seen, indeed, the hope and promise of a lasting and sincere type of truly American architecture—a style which is good because it is entirely logical.

Much is written and said of a needful betterment in American architecture, but when work of this character, even if rare, is demonstrated to be practically profitable, and if architects rigidly maintain such high standards of architectural taste and honesty in this type of building as have been evidenced in the development of this Chestnut Hill tract, certainly we are upon the threshold of a new era.

And one house of this type, well designed, must go further toward leavening (and ultimately transforming) the great bulk of American architecture, than six well-designed but economically unattainable country palaces.



Second Floor Plan.
TWIN HOUSES ON BENEZET ST., CHESTNUT
HILL, PA.
Duhring, Okie & Ziegler, Architects.



TWO PAIR OF DOUBLE HOUSES ON BENEZET ST., CHESTNUT HILL, PA.
Duhring, Okie & Ziegler, Architects.



A DOUBLE HOUSE ON BENEZET ST., CHESTNUT HILL, PA.
Duhring, Okie & Ziegler, Architects.

The QUESTION OF HEAT & VENTILATION

BY CHARLES L. HVBARD, ENGINEER

II. Problems Connected With Hospitals and Institutions.



THE large number of hospitals of various kinds and sizes which are being erected in different parts of the country brings to the special attention of the architect the matter of heating and ventilation for this particular class of buildings.

The requirements of hospital work are somewhat peculiar, and present a considerable variety of problems requiring especial study. Larger volumes of air are necessary than in other buildings, and especial attention must be given to the removal of dust and other impurities before delivering it to the wards. Simple methods of cooling the buildings, as much as possible, during the hottest days of the summer are among the details which must be worked out with a good deal of care.

Temperature regulation is important and provision must be made for perfecting this to a considerable extent, even where economy of construction is a matter to be carefully considered. The heating and ventilating of a modern operating room is a problem in itself, for the arrangements must be such as to prevent the falling of cool air from the large windows and skylights upon the patient during the operation. Furthermore, in addition to the regular air supply, provision must be made for quickly removing the fumes of ether from the room at any time it is necessary or desirable. Cooking, sterilizing, and laundry equip-

ment must be provided for when laying out the steam plant, as well as hot water service for toilet purposes.

The subject of hospital ventilation will be treated under three heads; the first taking up general matters which apply more or less to all hospital work, while the second and third will deal with details of design and construction applying to cottage hospitals and large city institutions, respectively.

AIR REQUIREMENTS, AND HOW COMPUTED.

The volume of air to be supplied to any building, whatever its use, is usually determined by assuming a standard of purity, based on the number of parts of carbonic acid gas allowable in each 10,000 parts of air. While the presence of this gas in a free state is neither disagreeable nor especially harmful, its effect is to decrease the readiness with which the carbon of the blood unites with the oxygen of the air, and therefore, when present in sufficiently large quantities, may cause, indirectly, not only serious, but fatal results. The real harm of ordinary vitiated atmosphere is caused by the minute organisms which are given off in the process of respiration, and as these exist in a fixed proportion to the amount of carbonic acid present, the latter serves as an indicator to the quality of the air. For this reason practically all tests for air purity are based on the proportion of carbonic acid found in the sample.

For the conditions of hospital work the proportion of carbonic acid should not exceed 5 to 6 parts in 10,000 of air; and as the average outside air commonly contains about 4 parts, it is evi-

dent that only a very small increase is allowable in this class of work. Assuming the average production of carbonic acid gas by an adult at rest to be 0.6 cubic feet per hour, and the outside air to contain 4 parts in 10,000, the cubic feet to be supplied per hour per occupant may be found by dividing 6,000 by the allowable increase in carbonic acid per 10,000 parts of air.

For example, to maintain a standard of purity of 5 parts in 10,000, the air supply should be $\frac{6,000}{5-4} = 6,000$ cubic feet per hour per occupant, and for a standard of 6 parts in 10,000, it should be $\frac{6,000}{6-4} = 3,000$ cubic feet, and so on.

HEAT NECESSARY FOR VENTILATION.

The heat necessary for ventilating purposes is that required for raising the temperature of the entering air from that outside to the normal inside temperature of the building, which is commonly taken as 70 degrees, and is entirely independent of that required for heating. This is computed by the formula:

$$V \times T$$

$H = \frac{V \times T}{55}$, in which

H = the heat quantity required, in thermal units (T. U.);

V = the volume of air supplied, in cubic feet per hour;

T = the rise in temperature, in degrees Fahrenheit.

T

The factor $\frac{T}{55}$ for different values of

T may be taken as follows:

TABLE I.

Value of T	Value of $T \div 55$
30	0.55
40	0.73
50	0.91
60	1.09
70	1.27
80	1.46
90	1.64
100	1.82

Hence, to find the T.V. required under any given condition, multiply the air supply in cubic feet per hour by the factor

for the corresponding rise in temperature taken from Table I.

When determining the size of the boilers, heaters, etc., for ventilating purposes, they should be proportioned for maximum capacity, which is commonly taken for a temperature rise of 70 to 80 degrees in New England and the North Atlantic States.

When computing the cost of ventilation, the average outside temperature for the heating season should be used, which for the same localities will run from 30 to 40 degrees above zero, thus making the required rise from 30 to 40 degrees in place of 70 to 80, as in the case of capacity.

Unless the building is in an especially exposed location it is customary to assume values of T of 70 and 35 for maximum and average conditions respectively.

COST OF VENTILATION.

With boilers of good design, and well cared for, about 8,000 T.U. will be utilized from each pound of coal burned on the grates. Therefore, the total T.U. required for ventilation, for a given period, divided by 8,000, will give the pounds of coal necessary, from which the cost can be easily computed.

For example, a hospital building is to be supplied with 500,000 cubic feet of air per hour, 24 hours per day. Assuming the heating season to be 220 days in length, with an average outside temperature of +35 deg., what will be the cost of ventilation with coal at \$3.50 per ton?

$$24 \times 220 \times 500,000 \times 35$$

Solution:

$$\frac{55 \times 8,000}{210,000} = 210,000 \text{ pounds of coal required, at a cost of } \frac{210,000}{2,000} \times \$3.50 = \$367.50.$$

HEAT LOSS FROM BUILDINGS.

As stated in a previous article, the heat loss from a building, which must be replaced by some form of heating system, is due to transmission through walls and windows, and to air leakage, both inward and outward. The rate of heat transmission depends upon the thickness and material of the building walls, and the difference between inside and

outside temperatures; while leakage is affected by the tightness of construction and strength of the wind. Formulæ and tables for the rate of heat transmission are mostly based upon actual tests, supplemented by practical experience.

The following corresponds well with average practice and gives the transmission in T.V. per hour per square foot of exposed surface for different building materials of varying thickness. Results are given for temperature differences of 60, 70 and 80 degrees, which cover the usual range of heating. If other conditions are to be provided for the rate of transmission is easily determined, as it varies directly as the temperature difference. While this table is given in connection with hospital work, it may be used for any other type of building to which it applies.

TABLE II.

Building Material	Temp. Difference		
	60°	70°	80°
8" Brick Wall.....	27	31	36
12" Brick Wall.....	20	23	26
16" Brick Wall.....	16	19	22
4" Reinforced Concrete..	57	65	74
8" Reinforced Concrete..	35	40	47
12" Reinforced Concrete..	26	30	34
Ordinary Wooden Construction	16	19	22
Slate on Matched Boards..	18	21	24
Tar and Gravel Roof....	18	21	24
Unlined Metal	48	56	64
Wood Floor on Joints....	19	22	25
Cement Floor	18	21	24
Single Window	73	85	98
Double Window	48	56	62
Double Skylight	42	48	56

These figures apply to a southern exposure and should be increased as follows for other points of compass: North,

1.32; east, 1.12; west, 1.20. While this general method of computation has been given in a previous article, the use of Table II gives it a much broader application. The loss from leakage depends upon the tightness of construction and may be provided for by increasing the heat loss from transmission by the factors previously given, that is, for good construction, multiply by 1.1; for fair construction, multiply by 1.2; and for poor construction, multiply by 1.3;. In case of very exposed locations it may be necessary to increase the total computed heat loss 10 per cent. or more, according to local conditions.

TYPES OF RADIATION FOR HOSPITAL WORK.

All direct radiation used in hospitals should be of a plain and open pattern so that all parts may be easily reached for cleaning. It is also desirable that the radiator be supported upon the wall, thus leaving the floor free from all obstructions for the accumulation of dirt. Radiators of this general type are now on the market and are made up with smooth surfaces and wide spaces between the sections. Connecting corridors and similar rooms, when heated with direct surface, are often provided with circulation coils of 1¼-inch pipe. This form of surface is fairly easy to care for when set out well from the wall to allow sufficient space for cleaning behind it.

For indirect gravity heating, any good form of indirect section may be used, but the casing should be made up with bolts, so that it may be easily removed for a thorough cleaning of the heater from time to time.

Aspirating coils for the acceleration of air flow through vent flues are commonly made in the form of a loop, of the general design shown in Fig. 1, for flues from a single ward or toilet, when the sectional area, does not exceed about 1 square foot. Loops of this kind are made of 1-inch pipe, and about 10 feet high. For larger flues, or where a number of smaller ones are brought into a single chamber and the air discharged through a common outlet. About 40 square feet of heating surface should be provided for each 1,500 cubic feet of

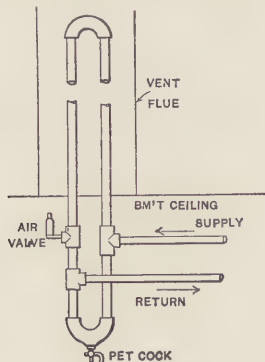


Figure 1.

air passing through the flue per minute. Heaters for this purpose should extend over the whole area of the flue, instead of being placed in the center, as is often done. They should be of open pattern with a free area between the pipes equal to the sectional area of the flue. Assuming one-half the over-all, or superficial, area to be free for the passage of air, it is only necessary to give the heater the same width as the flue, make the height of the pipes twice the depth, and place it in an inclined position, as shown in Fig. 2. Heaters of this type, made up

placed close to the bases of the flues which they are to supply, and the warm air is best brought into the rooms through wall registers, either in, or just above, the baseboard.

These are commonly located in the outer wall and preferably beneath the windows, if convenient, although the arrangement is not necessary.

With a fan system, where larger volumes of air at a lower temperature are supplied, the inlet registers are usually located in the wall about 7 feet from the floor, the same as in school rooms.

SIZE OF RADIATORS.

The size of radiators may be determined the same as for dwelling houses; that is, by dividing the total heat loss from transmission and leakage by the radiator efficiency for direct radiation, which may be taken as 250 for steam; 170 for hot water under gravity circulation; and 190 for hot water under forced circulation. For indirect steam, multiply the heat loss by 2.7 and divide by 450; for indirect hot water, under gravity circulation, multiply by 3 and divide by 340; and for hot water, under forced circulation, multiply by 2.9 and divide by 370.

SYSTEMS OF STEAM HEATING.

Low pressure gravity steam heating (2 to 5 pounds pressure) is adapted to buildings of small size, and where the ground area is small compared with the height of the building.

To work satisfactorily, the horizontal returns should be of moderate length and sealed if possible. The condensation may be returned to the boiler either by gravity or may be trapped into a vented receiver and pumped back, according to the size of the plant and the general arrangement of the system. Details of the piping for both of these methods will be taken up in a following article.

For large buildings, with long horizontal runs of piping, and especially in the case of cottage hospitals and large institutions made up of a number of separate buildings, a vacuum system, where a suction is attached to the main return in the boiler house, usually gives the best result.

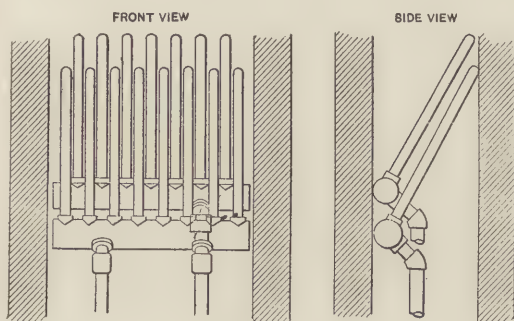


Figure 2.

of Nason tubes screwed into branch tees for bases, are found to be very satisfactory.

LOCATION OF RADIATORS AND REGISTERS.

Direct radiators are hardly ever used in hospital wards except occasionally in connection with some form of ventilating system, and then usually for use in extremely cold weather.

They are employed, however, in bath and toilet rooms, diet kitchens, serving rooms, store and linen rooms, and in connecting corridors, where supply ventilation is not required. While the logical place for a radiator is in the coldest part of the room beneath the window, it does not make any material difference in the case of small rooms, and the arrangement of furnishings is usually considered as equally important with the location of the radiator. In corridors, etc., where circulation coils are used, they should be run beneath the windows on the colder or more exposed side.

Indirect stacks or heaters should be

The size and arrangement of the radiators are practically the same as for a gravity return; also the method of making the pipe connections, except the two-pipe system, must always be used. The only difference at the radiators is the substitution of a thermostatic or motor valve in place of the usual hand valve on the return end. This particular form valve is so constructed that it will open to admit the passage of air and condensation but closes in the presence of steam, thus sealing the system of radiators against the return piping and so preventing short-circuiting through sections of the system nearest the boilers. Furthermore, by maintaining a certain difference in pressure between the supply and return mains, it is possible to secure a considerable temperature range within the individual radiators by means of graduated or fractional supply valves, which make it possible to vary the amount of steam admitted to them. Among other advantages of the vacuum system may be mentioned the ability to carry pressures considerably below that of the atmosphere, thus making it especially adapted to combined power and heating plants, where it is not desirable to increase the back-pressure upon the engines. Also, by attaching a suction to the main return, a rapid circulation is obtained through the system when steam is first turned on and the water of condensation is quickly removed from long runs of horizontal piping without surging or water hammer.

The general principle of this system of heating is shown in Fig. 3, and is practically the same as for ordinary low-pressure heating except for the points noted above. Referring to Fig. 3, it will be seen that the condensation is discharged into a vented receiver by the vacuum pump, where the air and water are separated before the latter is returned to the boilers by the feed pump. Other special features of the system are noted on the drawing and therefore do not require special mention.

The pipe sizes vary somewhat with the apparatus furnished by different manufacturers, but the following may be taken as a fair average.

TABLE III.

Size of steam pipe, ins.	Size of return pipe, ins.	Square feet of direct radiation	
		200 feet run	400 feet run
1	1/2	80	50
1 1/4	3/4	150	100
1 1/2	3/4	250	175
2	1	500	350
2 1/2	1	900	650
3	1 1/4	1,500	1,000
3 1/2	1 1/4	2,200	1,600
4	1 1/2	3,200	2,300
5	1 1/2	5,600	4,000
6	2	8,700	7,000
7	2	14,000	10,500
8	2 1/2	20,000	15,000
9	2 1/2	26,000	20,000
10	3	35,000	27,000

When connected with indirect surface, count each square foot as two of direct.

In determining the size of vacuum pump, the following may be used in the absence of more definite data.

TABLE IV..

Square feet of direct radiation.	Size of Vacuum Pump. (Single, double acting.)
2,500	4" x 5" x 6"
5,000	4" x 6" x 7"
10,000	5 1/2" x 8" x 7"
17,000	6" x 9" x 10"
25,000	6" x 10" x 12"
35,000	8" x 12" x 12"

Certain systems of vacuum heating are patented, and when one of these is employed the proportions of the various parts are best obtained from the makers.

When the thermostatic or other return valves are purchased outright, and installed by an independent contractor, the sizes of equipment given above may be used.

Another form of vacuum system is shown in Fig. 4. In this case the steam connections remain the same as in the

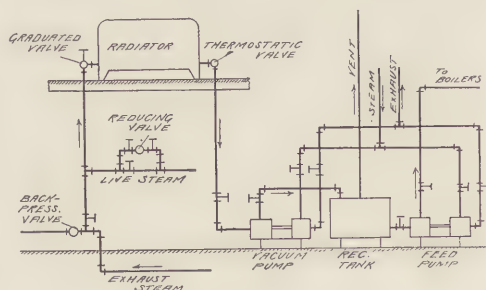


Figure 3.

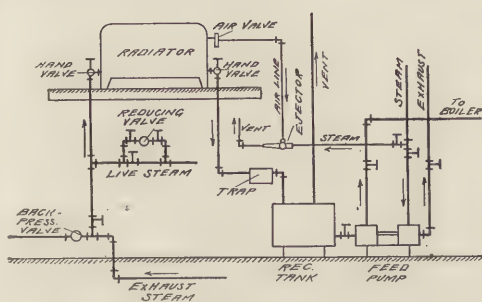


Figure 4.

low-pressure gravity system, but the usual air valve is replaced by one of special form which connects with a vacuum line in which the suction is produced either by a pump or ejector. This arrangement simply affects the removal of air from the radiators and has nothing to do with the return of the condensation, which flows back to the boiler or receiver by gravity the same as in the pressure system, and therefore is not so well adapted to the draining of long horizontal pipes as the first described, where a suction is applied directly to the main return.

SYSTEMS OF HOT-WATER HEATING.

The common system of gravity circulation, such as is commonly used in

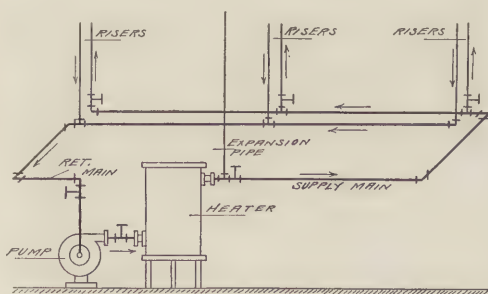


Figure 5.

dwelling houses, is not usually employed in hospitals except for those of small size. In the case of large buildings, and cottage hospitals where the wards are more or less scattered, it is necessary to use a pump for forcing the water through the mains. One of two systems of piping is commonly used for this work. In the

two-pipe system, Fig. 5, the supply and return are carried side by side, the former reducing in size and the latter increasing as the branches are taken off. As the difference in pressure between the mains is greatest nearest the pump, it is necessary to place throttle valves in the risers to prevent short-circuiting, and to secure an even distribution through all parts of the system. In the single-pipe, or circuit system, Fig. 6, a single main of uniform size is carried entirely around the building, one end being connected with the suction and the other with the discharge of the pump, as indicated in the cut. Supply risers are taken from the top of the main and the corresponding

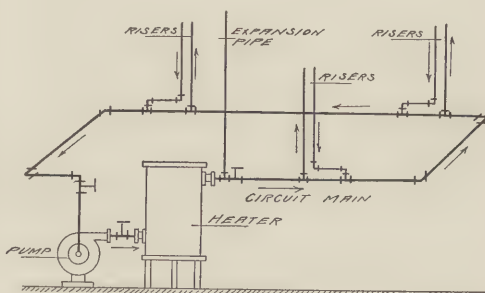


Figure 6.

returns connected into the side a short distance (4 or 5 ft.) further on. The size of main depends upon the velocity and volume of the water passing through it. It is customary in work of this kind to assume a drop of about 30 deg. in the temperature of the water while passing through the system, which causes each gallon of water to give out 250 T.U. Under these conditions 1 gallon of water per hour should be circulated through the system for each square foot of direct coil surface, and the same amount for each 1.3 square feet of cast-iron radiation. Here, as previously noted, each square foot of indirect surface may be taken as equivalent to 2 of direct cast-iron radiation. Having determined the volume of water to be moved, the size of main is usually based on an assumed velocity of flow, which varies with the size of pipe. This is not

arbitrary, but custom has established rates of flow approximately as follows:

TABLE V.

Dia. of pipe in inches.	Velocity of flow, in ft. per min.	Gallons circulated per min. at this velocity.
3	250	100
4	300	200
5	350	350
6	400	600
7	450	900
8	500	1,300

Example: A building contains 26,000 square feet of direct cast-iron radiation, what should be the size of the supply and return mains for forced hot-water circulation?

26,000

— = 333 gallons of water to
1.3 × 60

be circulated per minute, which, from Table V, we find calls for a 5-inch pipe.

The size of supply risers between the main and radiators may be taken as follows:

TABLE VI.

Square feet of direct radiation.	Size of supply and return risers for circuit system (Fig. 6). Ins.	Size of supply and return risers for two-pipe system (Fig. 5). Ins.
30	$\frac{3}{4}$	$\frac{3}{4}$
60	1	$\frac{3}{4}$
100	$1\frac{1}{4}$	1
150	$1\frac{1}{2}$	$1\frac{1}{4}$
300	2	$1\frac{1}{2}$
500	$2\frac{1}{2}$	2
800	3	$2\frac{1}{2}$

While the ordinary steam pump, of the plunger type, is often used for this class of work, the centrifugal pump is more frequently employed for this class of work. It is simple in construction, having no valves, and is usually driven by a direct-connected steam engine, turbine, or electric motor. As the water in a heating system is under a state of equi-

brium, the only power necessary to produce a circulation is that required to overcome the friction in the mains and radiators, and as the passageways through the latter are large as compared with the former, it is sufficiently accurate, under ordinary conditions, to consider only the mains.

The pressure or "head" for forcing the water through the mains commonly runs from 30 to 40 feet, and should not in general exceed 50 or 60 feet as a maximum.

The head required for this purpose will vary with the size of pipe, number of bends, length of run, and velocity of flow through it. With the sizes and velocities given in Table V, the required head will be about 3 feet per 100 feet length of run, which will include the usual number of bends. For example, the pressure head required to force water through a 5-inch main 1,000 feet in length, at a velocity of 350 feet per minute, is $3 \times 10 = 30$ feet, which is equivalent to $30 \times 0.4 = 12$ pounds pressure per square inch.

The proportions of a centrifugal pump for a given capacity and pressure head will depend upon the speed at which it is to be operated. Table VII gives data for pumps at comparatively high speeds adapted for direct connection with electric motors or steam turbines.

Pumps for lower speeds, to be used with steam engines, may be obtained when desired.

For example, a 5-inch pump running at a speed of 910 revolutions per minute will circulate 730 gallons of water against a head of 30 feet, and will require $0.309 \times 30 = 9.27$, or in round numbers, a 10 H. P. motor for driving it.

The water for a system of this kind is commonly heated by steam in an ordi-

TABLE VII.

Size of pump, Discharge, in inches.	Gallons of water moved per min.	Head produced, in feet, at different revolutions, per minute.					Diam. of impeller, in ins.	Horsepower required for each foot head.
		20	25	30	35	40		
3	240	1,020	1,130	1,220	1,320	1,400	9	0.136
4	430	875	970	1,050	1,130	1,195	10	0.217
5	730	765	840	910	970	1,030	11	0.309
6	1,050	710	780	845	905	960	12	0.446
7	1,440	605	670	720	775	820	14	0.606
8	1,880	525	580	630	675	715	16	0.791

nary form of feed water heater, although it may be done directly in a boiler, without the use of steam, the same as with gravity circulation. The reason for employing steam is that this system of heating is commonly used in combined power and heating plants, and the exhaust from the engines utilized in this way. When more heat is required a live steam heater is employed in connection with the exhaust heater as shown in Fig. 7, or live steam at a reduced pressure may be mixed with the exhaust, provided the oil in the latter is thoroughly removed so that the condensation may be returned to the boilers.

The square feet of tube or heating

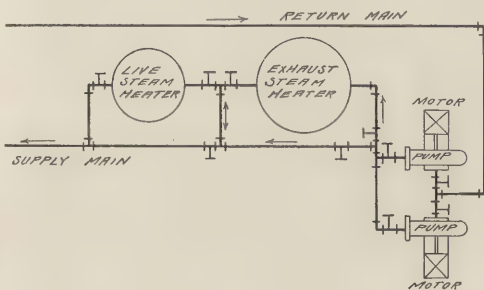


Figure 7.

surface in the heater will depend upon whether the water or steam is inside the tubes. With the water inside, there should be 1 square foot of heating surface for each 40 square feet of direct cast-iron radiation, while with steam in the tubes, and water on the outside, the ratio should be reduced to 1 to 25. This applies to low-pressure steam at atmospheric pressure or slightly above.

As commercial feed-water heaters are rated on a basis of $\frac{1}{3}$ of a square foot of tube surface per horsepower, the rating of the heater may be found by multiplying the required tube surface by 3.

COMBINING HEATING AND VENTILATION.

It is customary in the case of hospitals to combine the heating and ventilating systems in the wards and all other important rooms and thus do away with direct radiation, as far as possible. This is done in small buildings and cottage hospitals by using indirect stacks with a

gravity air supply of generous proportions, while in larger buildings, fans and hot-blast heaters are employed almost entirely in the best class of work. Details of both of these systems will be taken up in later articles.

TEMPERATURE REGULATION.

A very important detail of any system of heating is the regulation of the temperature, and this is especially true in the case of hospitals. In small buildings, heated by steam, mixing dampers are commonly provided at the indirect stacks and so arranged as to be operated from the rooms with which the various flues connect. These dampers are so designed as to by-pass a portion of the entering air around the heater, and so admit to the room above a mixture of such proportions of hot and cold air as to give it the desired temperature. The only method of controlling the temperature in rooms heated by direct steam is by opening and closing the valves at the radiators. When a vacuum system is employed, a small amount of regulation may be secured by varying the steam pressure by means of the reducing valve, and if graduated valves are provided, still more control is available in individual rooms.

Hot water gives a simple method of regulation, so far as the entire system is concerned, either by varying the temperature of the water or the rate of circulation by changing the speed of the pump.

Individual regulation at the radiators may be obtained to some extent by throttling the valves, but this is a rather difficult thing to do unless a special graduated valve is employed.

The best arrangement, and one which should be used if available funds will allow, is one of the pneumatic systems of temperature regulation which is entirely automatic in its action, except for the usual amount of care and adjustment which any device of this kind requires.

This apparatus consists of three essential parts; (1) an air compressor, usually operated by water pressure in small and medium sized plants and by steam or electricity in larger ones; with a reservoir and system of distributing pipes; (2) thermostats to be placed in

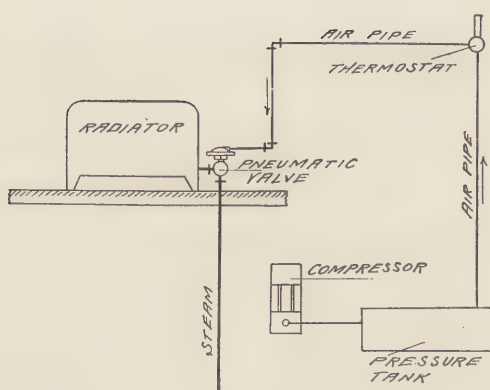


Figure 8.

the various rooms to be controlled; (3) pneumatic valves upon the radiators, or diaphragm attachments at the mixing dampers.

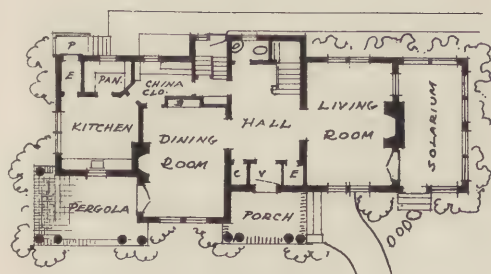
A thermostat is simply a mechanism for opening or closing one or more small valves, and is actuated by changes in the temperature of the air in which it is placed. When the room becomes too warm the movement caused by the expansion of a metal strip, or the vaporizing of a volatile liquid, opens a small valve and admits air from the pressure tank through the thermostat into the pneumatic valve, thus closing it and shutting off the steam or water supply. When the temperature of the room again drops below the normal for which the thermostat is set a reverse movement takes place, and the air pressure on the

pneumatic valve is released, causing it to open and admit the flow of steam or water to the radiator again.

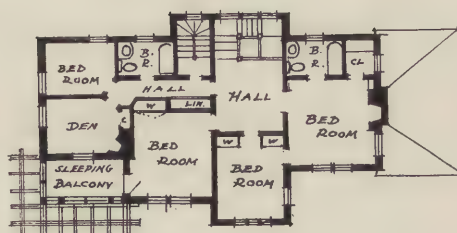
The arrangement of the different parts of this system, as applied to a steam radiator, is shown in Fig. 8, which needs no description further than given by the notes upon the drawing. When applied to the operation of a mixing damper, a "graduated" thermostat should be used instead of the regular form. The construction of this is such that a gradual movement is obtained, which holds the mixing damper in such a position that the right proportions of warm and cool air are delivered to the room to maintain the desired temperature. Were the "regular" form of thermostat used under these conditions the damper would be thrown to give either all hot air or all cool air, and it would be impossible to obtain a mixture of the proper temperature. When applied to hot-blast heating and ventilation in connection with a fan, the room thermostat is connected with a supplementary heater at the base of each individual flue, or with a mixing damper, when the double-duct system is used. A case of purely ventilating systems, where the air is delivered to the rooms at a constant temperature of 68 or 70 deg., a special hot-air thermostat is placed in the main airway beyond the fan and connected with one or more sections of the main heater, or with a by-pass damper which allows a certain proportion of cool air to pass around it.



PORTFOLIO OF CURRENT ARCHITECTURE

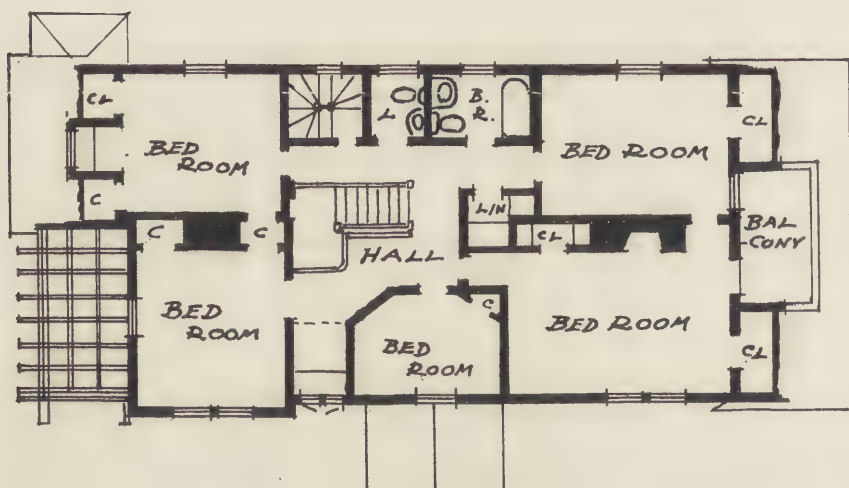


First Floor Plan.

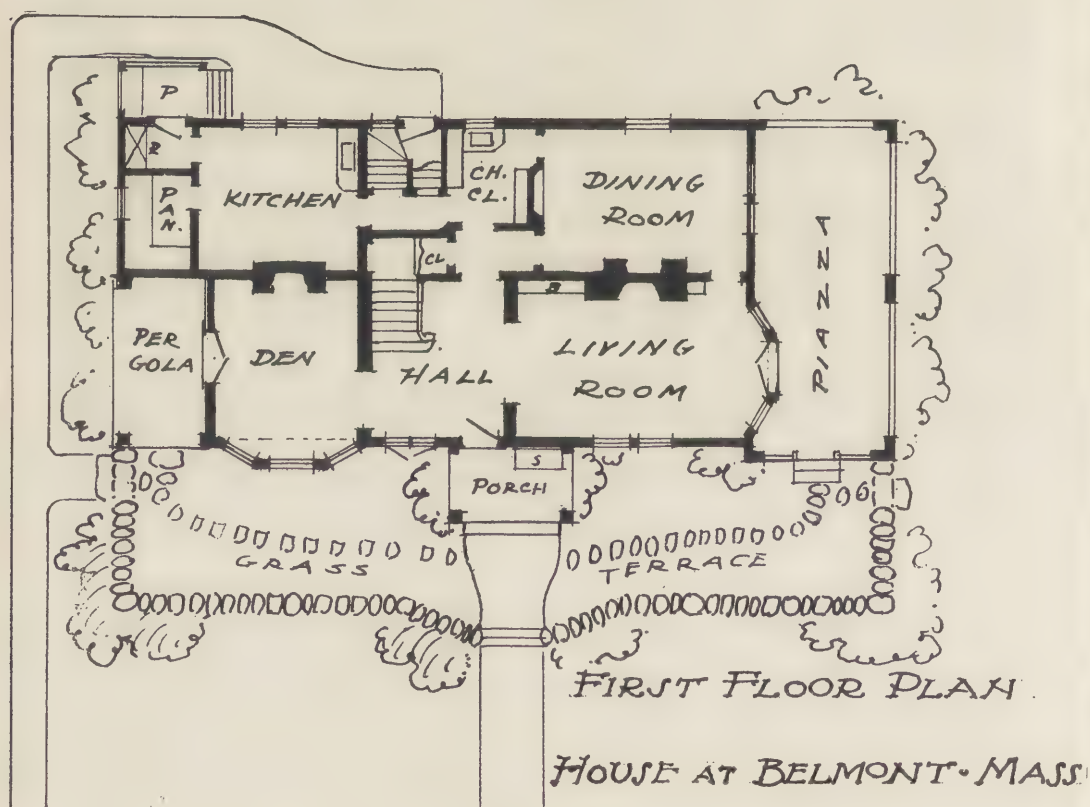


Second Floor Plan.

RESIDENCE OF WALDO L. HART, ESQ., ABERDEEN, MASS.
W. Northrop Dudley, Architect.



Second Floor Plan.



FIRST FLOOR PLAN.

First Floor Plan.

RESIDENCE OF GEORGE W. WARWICK, ESQ., BELMONT, MASS.

W. Northrop Dudley, Architect.



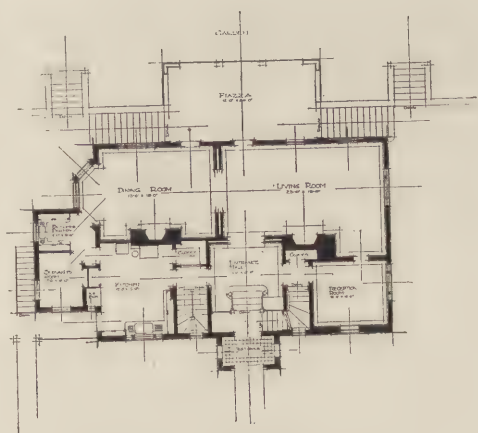
RESIDENCE OF GEORGE W. WARWICK, ESQ., BELMONT, MASS.
W. NORTROP DUDLEY,
ARCHITECT.



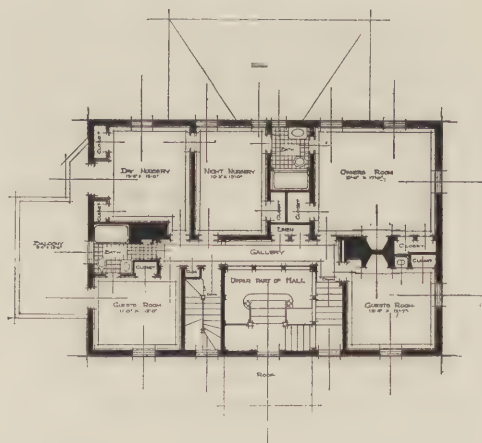
RESIDENCE OF WALDO L. HART, ESQ., ABERDEEN, MASS.
W. NORTHROP DUDLEY, ARCHITECT.



RESIDENCE OF PROF. JOHN M. BERDAN, NEW HAVEN, CONN.
Murphy and Dana, Architects.



First Floor Plan.

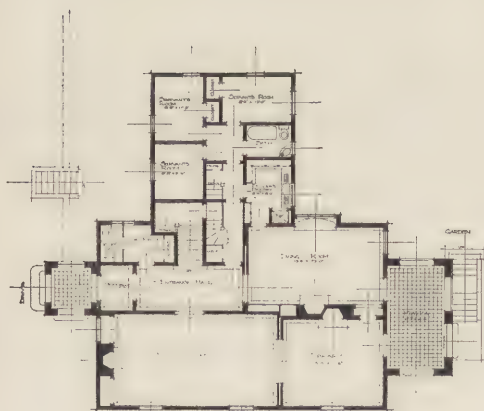


Second Floor Plan.

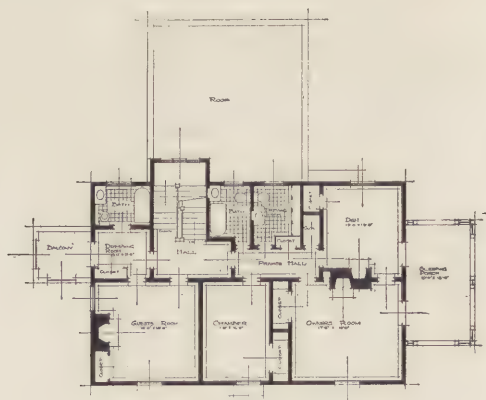
RESIDENCE OF PROF. JOHN M. BERDAN, NEW HAVEN, CONN.
Murphy and Dana, Architects.



RESIDENCE OF CHARLES S. DEFOREST, ESQ., NEW HAVEN, CONN.
Murphy and Dana, Architects.



First Floor Plan.



Second Floor Plan.

RESIDENCE OF CHARLES S. DEFOREST, ESQ., NEW HAVEN, CONN.
Murphy and Dana, Architects.



A HOUSE AT NEW HAVEN, CONN.
MURPHY AND DANA, ARCHITECTS.

WHAT DO WE KNOW ABOUT LIGHTING

A STUDY THEORETICAL, SCIENTIFIC & PRACTICAL
By F. LAURENT GODINEZ, CONSULTING LIGHTING SPECIALIST

V.—ON INDIRECT LIGHTING (Part I)

Photographs by August Patzig & Son

NOTE.—In this article the subject of indirect and partially direct lighting is discussed from many viewpoints. The possibilities of indirect lighting as an aid to architectural expression and in expressing character and individuality in lighting are indicated. Throughout the text photographs are interposed illustrating in an original way the interesting considerations involved. In the next article various installations of indirect lighting will be analyzed from both the viewpoints of the architect and the decorator.—*Editor.*



SEVERAL YEARS have elapsed since the first application was made of what man has so adroitly termed *indirect* lighting. The idea of concealment of source is not new, and like most things startling and original which are for the welfare of mankind it would seem that Nature had indicated the way, for the moon shines down upon us by the Sun's *indirect* light. Indirect lighting had to come. Its advent was authoritatively prophesied in 1902 by Dr. George M. Gould, editor of *American Medicine*, in Volume I of his *Biographic Clinics*, in the chapter on the Physiology of Vision, he states, "The millions of dollars spent each year in illumination are in great part wasted and misspent, and by the methods used all the harm is done to the eye that is possible." Then he adds "No room should be lit in such a manner that the individual lights are visible. Illumination should be by transmitted, dissipated, and reflected light. There is nothing more tiring to the eye than numerous separate lights whose images upon various parts of the retina create there a large number of useless and exhausting stimuli from which there is no

escape by device or turning!" It was unfortunate that the development of the tungsten lamp should have been attended, by such a dangerous increase in source brilliancy—but in another sense this overbrightness directly precipitated the advent of indirect light—further accelerated by the economic feature of the lamp and its rapid replacement of its predecessors the Tantalum, Metallized Filament—and Carbon type.

Fundamentally indirect lighting, from a utilitarian viewpoint represents the utilization of secondary diffusing areas of large size over the reflecting or diffusing areas of small size typical of direct lighting. With translucent shades of glass, we have a condition where reflected light from a smooth, or diffused light from a rough, inner shade surface is redirected *downward* below the shade over an area limited by the height of the lamps above, and the shape of the redirecting surface. Depending upon the density of the glass forming the shade more or less light is transmitted through the shade towards the ceiling. From a strictly utilitarian viewpoint and without any regard for aesthetic or architectural considerations, from an illuminating engineering viewpoint this light transmitted ceilingward is of very little value because there is not enough of it directed on the ceiling to materially influence the brightness of

the working plane below after the absorption attendant to the several redirections of light from ceilings to side walls, and from sidewalls to floor which must inevitably occur before light impinging on a ceiling can reach the plane below. In proof of this let us consider an interior having a yellow wall and ceiling absorbing 60 per cent. of incident light. We will assume this interior to be illuminated by a 10-inch ground glass ball enclosing a 150 watt clear tungsten lamp. The lumens* emitted in the various directions above and below are as follows:

Angle.	Lumens
0—60° Effective flux	216
0—90° Lower hemisphere	505
90—180° Upper hemisphere	501
0—180° Total flux	1,006

A ground glass ball was chosen in fairness, so that practically an equal quantity of light is distributed above and below the globe. Of course any *shade* would redirect more light below than it transmitted light *above*.

Starting with 501 lumens in the upper hemisphere it is evident that at least *three* reflections must take place before the light can reach the plane below. Hence,

501 less 60% (300.6) = 200.4 after first reflection.
200.4 less 60% (120.24) = 80.16 after second reflection.
80.16 less 60% (48.09) = 32.07 after third reflection.

While theoretically interiors are not presumed to be occupied by individuals who disregard the practically unrealized idealism of laboratory calculations, we will assume, nevertheless that actual human beings inhabit these premises in question, and that for reasons unknown to an illuminating engineer they have decided to change their wall paper from yellow to light blue having an absorption factor of 75 per cent. Now, without deducting for any of those common sense, practical considerations which are so foreign to the laboratory yet so common in actual practice, we will grant the impossible, admitting for the sake of

argument that old lamps give as much light as new, that light can pass freely through dirt on the outer surface of a shade, and that shades and lamps are universally kept scrupulously clean. Yes, admitting all this we will start in our blue room just as we did in the yellow one with exactly the same conditions—free from all disturbing elements of a practical or human nature. Then with the same quantity of light above, as in the first case 501 lumens the following results obtain:

501 less 75% (375.75) = 125.25 after first reflection.
125.25 less 75% (93.93) = 31.32 after second reflection.
31.32 less 75% (23.49) = 7.83 after third reflection.

Therefore, in the first case with *yellow* paper, the net contribution of useful light received by the ceiling and in turn redirected by the side walls to the lower part of the room would be 32.07 lumens of 3,1779 per cent. of the total light emitted by the combination of 150 watt tungsten lamp and ground glass ball, and 6.4 per cent. of its total light in the upper hemisphere.

In the second case with *blue* paper the value remaining after the 3d reflection (7.83) would only represent 0.77 per cent. of the total light of the lamp and ball, and but 1.56 per cent. of its upper hemispherical light.

From this it is evident that in order to obtain any value on a working plane below from light directed toward the ceiling it is necessary to do more than allow it to radiate aimlessly and uneconomically in a haphazard upward direction—in fact every ray of light from a gas or electric lamp must be interrupted by a reflecting surface of the highest reflecting power, and the light from it so distributed over the ceiling area as to be redirected back again at a proper angle. This involves physiological and psychological considerations which we will discuss in the order named, but before leaving the utilitarian aspect we must revert to the analogy existing between the inefficient distribution of light on a ceiling by translucent glass shades, and the placement of a cluster of lamps in a glass bowl without any redirecting

*A lumen is the amount of light required to produce uniform illumination of one foot candle over an area of one square foot.

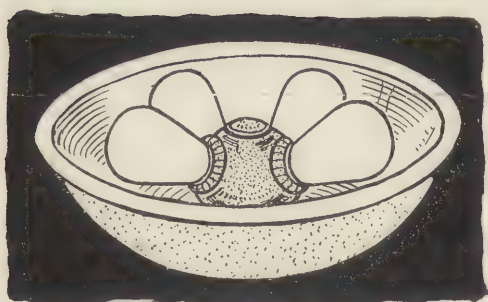


Fig. 1. The mere grouping of base lamps within a glass bowl is wasteful and ineffective—at best a miserable compromise between direct and indirect lighting.

surface other than the inside of the bowl.

The glass maker has produced in opal glass many attractive urns and bowls which lend themselves gracefully to indirect lighting applications. In utilizing these it is necessary, however, to utilize inner reflectors of high reflecting power if any benefit or effect is desired from ceiling diffusion. The mere grouping of bare lamps within one glass bowl without individual reflectors is at best a miserable compromise between direct and indirect lighting. This is because the inner surface of such glassware generally has a negligible reflecting or diffusing (redirective) action, and in practically all instances the light sources are stupidly placed so that their effective distribution can not be utilized. Fig. 1 shows how lights are usually placed in glass bowls, the arrangement having no redeeming feature to justify its perpetration on an unthinking public.

In an article in "Architectural Record" for May, on page 462, Figs. 9 and 10 illustrate how the expression of artistic glassware is destroyed by overlighting. Fig. 2 depicts the correct method of placing light sources within

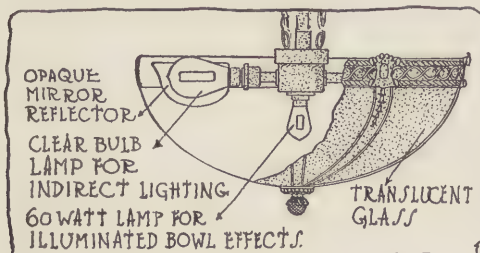


Fig. 2. Correct treatment of indirect lighting equipment in a glass or alabaster bowl.

a glass bowl so as to direct every ray of light from the lamps on the ceiling without waste, a small bare lamp being used below solely for the purpose of adequately expressing the character of the glassware, and enhancing rather than distorting its pictorial value. The arrangement of lamps and reflectors in such a fixture is shown in Fig. 3, which applies when glass bowls of shallow type are used. One of these is illustrated in Fig. 4, showing an etched design which is thrown into decided bas relief when not over saturated with transmitted light. Just as in the case of the genuine Alabaster bowl described in the May issue, page 462, this bowl of American manufacture can be so marred by overlighting that it becomes a glaring splotch of light—an annoyance to the eye—a



Fig. 3. Top view of the fixture illustrated in Fig. 2, showing arrangement of lamps and reflectors.

distraction, rather than an attraction factor.

The value of indirect lighting is that it enables one to use light as an aid to architectural expression, by placing reflectors within formations which are part of the architectural or decorative treatment of an interior. Fig. 5 and 6 illustrate typical ornamentations which lends itself gracefully to such applications. The opaque reflectors described in my article are the best for such usage, for the reason of the permanency and high efficiency of their reflecting surfaces.

This is admirably illustrated by Fig. 7. Within compartments formed by black curtains are six 100 watt tungsten lamps. No. 6 is a flat square of plate



Fig. 4. One of thousands of designs applicable to indirect lighting fixtures.

glass with a quick-silver backing, in other words an ordinary mirror. In comparison with the other cards No. 6 is very dark. This is because the most useful, horizontal light of the lamp radiates without striking any redirecting surface. Consequently, it is not redirected, as is evidenced by the *brightness* of the adjacent side curtain near the lamp, and the darkness of the card (No. 6) below which is receiving only the meager down-



Fig. 5. The indirect lighting source can be an urn placed in the corner of a room.

ward light from the lamp tip. In No. 5 is a bare 100-watt tungsten lamp, and by comparing No. 5 and No. 6 it is evident that the flat mirror plate is neither useful nor ornamental — which possibly explains its popularity with the mercantile public in the ceilings of display windows. No. 4 is an ordinary piece of blotting paper in the form of a cone, placed over the lamp so that its horizontal light is intercepted, redirected, and utilized. The difference of intensity on card No. 4 as against Nos. 5 and 6 is remarkable, but attention is directed

to the fact that the picture is taken on *one* plate. Contrasted with the non permanent blotting paper reflecting surface in No. 4 is a pure silver plated reflector in No. 3, having an absolutely permanent reflecting surface. No. 2 is another type of such a reflector arranged to allow sufficient light to pass above the reflector neck, sufficient to illuminate an enclosing glass bowl. No. 1 is an ordinary opal shade allowing as much light to be transmitted through, and above the shade, as is redirected by its inner surface on the card (No. 1) below.

Fig. 8 shows the comparison booths slightly changed. The mirror plate is still above the 100 watt tungsten in 6,



Fig. 6. Indirect lighting units may be concealed within such urns with varied and interesting effect.

but in 5 an ordinary newspaper has been placed about the bare 100 watt lamp just by punching a centre hole and forcing the lamp through it into its receptacle. Even this newspaper with its very inferior reflecting surface intercepts and redirects considerable light, as can be seen by comparing card No. 5 with No. 6—No. 5 being palpably brighter. In 4 the silvered reflector previously applied has been placed over an inverted Welsbach Reflex gas lamp. The greater brightness of card No. 4 over No. 3 which receives light from a 100 watt tungsten lamp in a silvered reflector is very marked, being due to the greater downward light from the tip of the in-

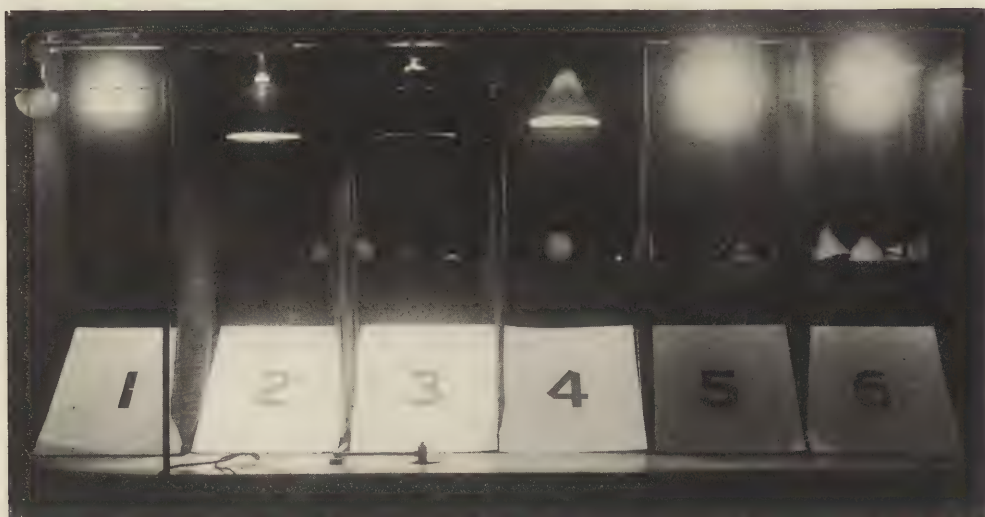


FIG. 7. A COMPARISON SHOWING THE EFFECTS OF VARIOUS REFLECTING SURFACES.

verted gas mantle with its greater light radiating surface at that point. For purposes of comparison the shade of blotting paper has been again placed in No. 2, and in order to illustrate the difference between *transmitted* and *reflected* light from sources of equal size—an inverted Welsbach gas mantle is placed in No. 1 of the same size and type as that in No.

4 but enclosed within an opal ball of light density. A study of booths No. 1 and No. 4 instructively reveals the fact that while card No. 4 is brighter than card No. 1 this merely signifies that the utilization is different—not that the lamp in No. 4 is giving *more* light than that in No. 1, which allows considerable light to be transmitted on the horizontal and above, as evidenced by the brightness of the adjacent side curtain and top bar, as compared with booth No. 4, where no light is transmitted *above* the reflector. The best feature about these comparisons is that they are visible to the eye. Seeing is believing, and in judging lighting equipment the day is at hand when the eye must decide, not the mind, confused by a mass of impractical, theoretical “figures” or “photometric curves,” based on the unnatural test conditions of the laboratory. While these comparison booths are much more interesting than comparative figures, actual applications are of even greater appeal. To illustrate the effect of indirect lighting compared with ordinary direct lighting observe Fig. 9: The lantern illustrated is one of a type used on thousands of porches and is presumably intended to light the stairs, reveal the house number and cast a few friendly rays within the vestibule, perhaps in the direction of an obscure keyhole. Within this lantern,



Fig. 9. Typical veranda lighting with 40-watt lamp within opal cylinder.



FIG. 8. COMPARISON OF WELSBACH REFLEX LAMPS WITH TUNGSTEN LAMPS, USING VARIOUS RE-DIRECTING AND TRANSMITTING MEDIA.

surrounded by a cylinder of fluted opalescent glass, is a 40 watt tungsten lamp. If this opal glass were conically shaped, and placed apex downward over the lamp, the slope of its sides would cause considerable reduction of light, for reasons which I have fully explained in earlier articles. Now glance at Fig. 10, showing the same veranda lighted indirectly by a 40 watt tungsten lamp within an indirect lighting fixture, consisting of a brass bowl, old ivory finish concealing a reflector of pure silver deposited on glassware. So much discussion has been caused by these two remarkable photos that I have had another taken, showing the verandas of both houses, giving a comparison of the old and the new lighting on one plate. This photo will appear in the October issue in the second part of this article. These photos, Figs. 9 and 10, illustrate admirably the fundamental principles of indirect lighting in so much as utilization of light is concerned. The condition depicted in Fig. 9 is one where light is transmitted through glass so that the valuable *horizontal* light from the pendant source streams aimlessly between ceiling and floor with a strata of darkness above and below. The shadow cast by the porch columns and projected on the side of the next house by the corner street light is well defined, whereas in Fig. 10 with indirect lighting it is

hardly noticeable, owing to the equalizing light received by the side wall of the next house from the ceiling above the indirect lighting unit. It is not necessary to use the three-chain suspension indicated in Fig. 10 since the simple bowl required for such applications is well suited to either the single stem or chain.



Fig. 10. Indirect lighting with 40-watt lamp and reflector equipment.



A Georgian Revival

It is interesting to observe that Boston has been recently plumbing itself on its Georgian architecture. Recognition of the predominance of that style in Boston is not a new thing. Strangers have said before this that Boston is more Georgian in some respects, and perhaps as a whole, than any place of similar importance in England itself. But it is quite a new thing to hear this boastfully said by Bostonians, and to find at least one Boston newspaper proudly calling attention to the fact and urging local architects to devote themselves with an even greater unanimity to this one style. The Transcript, in doing this editorially, makes use of a truly Bostonian phrase, when it says, "There are almost no other American cities where a sophistication of taste exists sufficient for building consciously toward a municipal style in harmony with its historical past."

It is true enough that within the last year or so there has been in Boston a remarkable turning to the Georgian style in the construction of the smaller business buildings. That style has been used heretofore very largely in the town houses of the city and in the designing of institutions, schools, hospitals, town halls, libraries and college dormitories have conformed to the graceful tradition. But until within the last year or so the business building has only occasionally adopted this style. Georgian's virtues are threefold as applied to Boston—adaptability, historical appropriateness and harmony. It must be said, also, that its use is giving to the city a comfortable, home-like look, which sets it apart from the rushing, restless metropolis and that lends to it distinction and character.

A Study of Cities

It has proved a remarkable summer in Europe for the study of city planning. There has been, in addition to the summer school of Town-planning at Hampstead, a scientifically organized Building and Homes Exhibition in Leipsig, an International Road Congress in London—at which one of the leading papers was that presented by Nelson P. Lewis, of New York, and an exhibition and International City Planning Congress in Ghent, while the International Housing Congress is to be held at The Hague in September. If there never has been before such a combination of educational opportunities for the student of city planning, it is by no means certain that with the growing interest in the subject, like opportunities may not come again. Already plans are under way for an International Urban Exhibition to be held next summer in Lyons. A commissioner for the United States has been appointed, and a number of important congresses are to be held.

Of this summer's events, the Ghent Exhibition, the Road Congress and the Housing Congress, are probably the most important. To "The Town Planning Review," Professor Geddes, who had charge of the "Cities and Town Planning Exhibition" there, has contributed a long and characteristic account. With his Carlyle-like mode of expression, and his flood of thought, it is not always easy to tell what Professor Geddes is writing about; but the light which breaks through now and then is so illuminating and stimulating, that to understand even a part makes it worth while to read his descriptions.

It is clear that in the elaborate review of cities which he has prepared for the Ghent

Exhibition, there was arranged an exhibit of such scope and purpose as we have not had before. Divided into a large number of rooms and sections, one passed from cities of classical antiquity—such as Babylon, Jerusalem, Constantinople, Athens and Rome—to the cities of the Renaissance—Florence, Rome, Nancy, etc.—and thence into long galleries devoted to the great modern cities, of America as well as of Europe, which have grown out of these. These galleries led on the one side to a room containing a reference library, and on the other to a room illustrating the development of various civic features (railroad stations, for example) which here were shown, not by cities, but by subjects, so that their development could be traced. Then one passed into a long hall in which was emphasized the human significance of cities, by means of census charts, vital statistics, child welfare exhibits, etc. Beyond this corridor came another series of rooms in which city development was shown from a different viewpoint. Beginning with geographical origins, one passed to mediaeval cities, and thence to a room showing the changes wrought in them by war and time. Then appeared the industrial revolution in its effect upon cities, and beyond this a large gallery devoted to the garden suburb and garden city movement. At the end there was a room given up to Professor Geddes' special hobby, the survey of cities and towns. The obvious purpose of the whole exhibition has been to give to the modern science of city building a historical background, and to indicate the significance of the present as a link between the past and the future of cities.

Building Height and Economics

The letter which Arnold W. Brunner, as Chairman of the Fifth Avenue Commission, has sent to Edward M. Bassett, as Chairman of the Mayor's Height

of Buildings Committee, is of interest mainly for its economic arguments. After rehearsing briefly the arguments for a limitation of building height on Fifth Avenue, which were presented in the Commission's preliminary report to Mr. McAneny, the letter continues: "It seems obvious that the heights of buildings should be proportioned to the width of the streets on which they are built. The roadways will accommodate a certain amount of traffic and the sidewalks will take care of a certain number of pedestrians, but as the population of the abutting buildings becomes greater the

streets are inadequate. Mr. McAneny has done whatever was possible to increase the capacity of the streets by removing the illegal projections, but there are no more projections to be removed and the streets cannot be widened. We are told that the owner of a piece of property should not have his rights abridged, but his neighbors have rights and the public has rights. We believe that the good of the entire city is more important than the desires of the individual. After conference with many owners of real estate it is gratifying to find that they would welcome a law limiting the height of buildings. It would steady the value of real estate, make it a more permanent investment, and less of a speculation." Mr. Brunner adds that the remarkable increase of population in German cities is evidence, if any were needed, that the restriction of building height does not discourage building, but on the contrary stimulates it. The letter gains not a little of its significance and interest from the fact that so little is said of the aesthetic arguments, which do not seem as yet to have persuaded men, and that such telling points can be made on the economic side.

New York's City Planning Law

The rapidly accumulating body of American city planning legislation has lately received in New York State an addition which has hardly had the attention it deserves. This is in an amendment to the general municipal law which authorizes and empowers each city and incorporated village in the State to create a commission to be known as the city, or village, planning commission. To such commission may be referred, for report and criticism, "the adoption of any map or plan of said city or incorporated village, or part thereof, including drainage and sewer or water system plans or maps, and plans and maps for any public waterfront, or marginal street, or public structure upon, in or in connection with such front or street, or for any dredging, filling or fixing of lines with relation to said front; any change of any such maps or plans; the location of any public structure upon, in or in connection with, or fixing lines with relation to said front; the location of any public building, bridge, statue or monument, highway, park, parkway, square, playground or recreation ground, or public open place of said city or village." Furthermore, the local authorities may provide by ordinance or resolution that

henceforth no street plan or subdivision shall be recorded in the office of the County Clerk until it has been approved by the commission. In the first class cities the commission is to consist of not more than eleven members; in second class cities, of not more than nine members; and in third class cities of seven members. The commissioners may or may not be paid salaries.

Not the least significant fact in regard to this legislation is that the new law was drafted by the city planning advisory committee of the Conference of Mayors of New York State, that committee working in conjunction with the city planning committee of the City Club of New York. The members of the Mayors' advisory committee—all New Yorkers, with one exception—are Arnold W. Brunner, Nelson P. Lewis, Charles Downing Lay, Daniel L. Turner, and Edward Green of Buffalo.

The committee, having secured its legislation, proposes to devote its energies this year to the establishment of a city planning commission in every city of the State. In its report to the Conference of Mayors it very wisely said: "The condition of change and growth requires constant and definite action by city governments looking to proper provision for streets, parks and public buildings. For this reason we believe it is highly desirable that the various city governments should have the advice of a commission of citizens, composed of engineers, architects, landscape architects and business men; and we therefore urge every mayor and his board of aldermen to create a city planning commission."

A Successor for the Late M. Despradelle

Advices from Paris to President Maclaurin's office announce that the two vacancies in the department of Architecture at the Massachusetts Institute of Technology have been filled, the men coming to the Institute being Frenchmen and graduates of the Ecole des Beaux Arts. The vacancies in question are those caused by the death of Professor Despradelle and the resignation of Allen H. Cox.

The selection of suitable men for the department was given to Professor H. W. Gardner, who went to Paris early in the


year. Looking carefully over the men available and in consultation with members of the Technology corporation who were in Europe, Professor Gardner recommends Jean Frederick Weilhorski, of Tours, for successor to Professor Despradelle and Albert LeMonnier, of Paris, for the other place.

M. Weilhorski, whose title at Technology will be Rotch Professor of Architectural Design, is a practising architect of Tours. He is about forty years of age, with an English-speaking wife and a little daughter. His record, which will appeal to architects and to architectural students, includes four years (1894-98) at the Beaux Arts, and his subsequent awards are, in 1900, the second Rougevin prize, the next year he gained the Godeboeuf prize and in 1902 the Prix Labarre. His fourth consecutive award, in 1903, was the second Grand Prize of the school, and at various times he received medals for projects, sketches, and in archæology. In 1900 he was designated laureate of the Central Society of French Architects, and the honor was repeated in 1902.

M. LeMonnier, whose title at Technology will be assistant professor of architectural design, is a young man, not yet thirty, unmarried, and not as yet speaking English. He was admitted to the Beaux Arts in 1903 and selected for his master H. M. Héraud. It is the custom in the French school for the students to associate themselves with some one of the great masters, and there comes from this a directness of contact that makes for the career of the young man. M. LeMonnier has received more than fifty awards in the various competitions related to the school. He holds two medals in school problems, and in the Concours Rougevin and the Concours Godeboeuf. For sketch competitions he has two medals and three first mentions, he holds two medals on problems in archæology and two on problems in decorative composition. He has received one medal each in modeling and perspective and thirty-eight other mentions.

With Professor James Knox Taylor for its head and such excellent replenishings of losses and the continuance of the strong instruction force that it retains, the Technology department of architecture should continue the excellent and forceful work for which it has so long been noted.

ANNUAL COUNTRY-HOUSE 1913 NUMBER



Edmund B. Gilchrist,
Architect...

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COUNTRY HOUSE AT GREAT NECK, L. I.
WILSON, EYRE & McILVAINE, ARCHITECTS.

THE ARCHITECTURAL RECORD

OCTOBER, 1913

VOLUME XXXIV



NUMBER IV

"EDGERTON"—A STUDY IN THE TUDOR STYLE

THE FREDERICK F. BREWSTER^{ESQ.}
RESIDENCE AT NEW HAVEN, CONN.
STEPHENSON & WHEELER ARCHTCTS

By RICHARD H. DANA, JR.
THE PHOTOGRAPHS BY JULIAN BUCKLEY & JEWETT.



THE adaptability of Tudor domestic architecture to country houses in America today has not often been advocated in theory and still less often established in fact. And yet this is surprising when we free our minds from prejudice and look at the characteristics and spirit of this Tudor style. Coming at the period when the Englishman's fortified castle had gradually been transformed into his country house, it is natural that we find special emphasis on the new domestic, comfortable and cheerful features. The irregular flexible rambling plan, spreading out its unequal wings to winter's sun and summer's breezes, was made for inside convenience and comfort and not for the exterior effect. Yet the very features

that made the interior attractive, such as deep bay-windows, grouped windows with long, unbroken walls between for books and tapestries, proved to be effective and interesting on the exterior also. The broken skyline of gables, towers and chimney pots fitted in with the irregularities of the trees and landscape, and did not need the formal terraces and gardening as transition to the informal country-side such as the later Renaissance found necessary. The adaptability of the exterior to various materials made the use of local peculiarities economical and interesting—whether rough stone, limestone, brick, half-timber, stucco, or terra-cotta. All these Tudor qualities of flexibility and livableness so suited the home-loving English people that they persisted on and on through the Renaissance period, in spite of the attempts of the architects to force the formality of the classic orders, and absolutely symmetrical plans and elevations. So that, to-

day in England, though some of the new houses may be Renaissance in detail, they are almost always Tudor in spirit. What is more natural, then, that we in America, whose traditions are so largely English, and whose country life is more and more becoming like that in England, should find this Tudor style suitable to our needs?

Our appreciation of this style, however, is not yet general, owing largely to the following causes: We have failed to distinguish always the Tudor from the Victorian Gothic; and, in our horror

found at "Edgerton," the new country house of F. F. Brewster, Esq., in the outskirts of New Haven, Conn.—placed in the midst of an exceptionally lovely place of about twenty-five acres—it seems to belong to the grounds and to be a part of them. The natural wish for privacy is satisfied by enclosing this whole place with a ten-foot wall. This is not at all as formal or unfriendly as it might sound, owing partly to the varying colors of the native trap rock, and to the massive piers that break the long stretches, but chiefly to the large, handsome trees overhanging



THE GATE LODGE, RESIDENCE OF F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
Stephenson & Wheeler, Architects.

of the battlemented Hudson River Castles, have turned for refuge to the formality of the Renaissance styles, especially the popular stucco villas or colonial homesteads. This formality has still further been emphasized by the academic training of the architects at the Beaux-Arts, in Rome, and in the schools in this country. But is this classic spirit what the country dwellers themselves really want in their homes? Is not the Tudor informality just beginning to be appreciated and accomplished among us?

One of the most pleasingly convincing proofs of the appropriateness of this English style to American soil is to be

it at frequent intervals. At one corner of this wall under tall pines and hemlocks is the gateway with its tall Jacobean posts and simple massive iron gates; and, just inside, the gate-lodge with its stone gables, slate roofs and cozy mullioned windows. The sweep of the lawns, broken with handsome groups of white pines, oaks and chestnuts, is divided by a curving hollow which is spanned by a decorative stone foot bridge. The broad, curving driveway ascends gradually to the house, which stands on high ground, half hidden by unusually large trees.

The house, on first view, appears more like a village than a single house, so



THE ENTRANCE FRONT, RESIDENCE OF
F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
STEPHENSON & WHEELER, ARCHITECTS.



THE STAIRWAY, RESIDENCE OF F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
Stephenson & Wheeler, Architects.

varied and extensive are its ramblings among these old trees. Its animated skyline of gables and high chimneys varies in height from the massive three-story tower near the centre to a long, low garden porch at one end. The openings vary in size and grouping from broad arched windows, generous bays and oriel, to tiny single windows in some massive wall. The color and materials vary from the local trap rock of the big tower and certain wings, to the half-timber of other wings and the plain cream-colored stucco of the service wing. The roofs of heavy rough gray-green slate and the concrete stone of the porches, mullions and chimney pots complete the exterior color scheme, unusually varied and yet quiet and harmonious. In front of the main entrance is a broad terrace with large fountain. The entrance itself is in the form of a low vestibule porch pro-

jecting out to the curve of the drive, and appears attractively small and intimate in comparison with the high tower of the building behind it.

The plan in general is irregular and rambling, with the greatest length running north and south, and a long service wing at right angles from the northwest corner. Off of this general mass are smaller wings as the requirements demanded. Most of the rooms on the first floor are unusually large, but so furnished as to seem informal and livable. Contrasting with these are smaller rooms, conveniently tucked in between. The style is principally Tudor, with some Elizabethian and Jacobean details, and even two rooms frankly Georgian. The color schemes are almost too varied from one room to another—but the rooms are so separated from each other that this is not unpleasant.



THE GREAT HALL AND FIRE PLACE, RESIDENCE
OF F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
STEPHENSON & WHEELER, ARCHITECTS.



THE GREAT HALL, RESIDENCE OF
F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
STEPHENSON & WHEELER, ARCHITECTS.



WINDOWS IN THE GREAT HALL, RESIDENCE OF
F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
STEPHENSON & WHEELER, ARCHITECTS.



STAIR DETAIL—RESIDENCE OF F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
Stephenson & Wheeler, Architects.

The entrance leads directly into the Great Hall—not the typical mediaeval Great Hall, yet large enough, with a length of 51 feet and a width of 35 feet, to deserve that characteristic name. The dignified and proportionate height of 18 feet is gained by lowering the floor of this part of the house several steps; this enhances the effect of the first floor vistas, without hampering the second floor levels. The first impression of spaciousness is soon followed by a sense of massiveness, caused by several very broad arches in thick stone walls and sturdy ceiling beams. This is again followed by a feeling of soft, mellow colors, no formal scheme, but a free mixture of various colors; the restful surfaces of the warm gray stone walls, and the placid floor of Hauteville marble contrasting with the large rug of blues and greens, and the golden-red teakwood ceiling and beams. The livable quality of this room, remarkable for its size, is increased by the com-

fortable character and grouping of the furniture—wing chairs and sofas in greens, browns and quaint chintzes, and refectory and gate-legged tables in dark oak. The large twelve-light mullioned windows looking out onto the terrace are decorated in the upper lights with small leaded medallions, and softened at the sides with rich green hangings. Two striking vistas are obtained as one sits by the generous fireplace—one looking up the broad stone stairs flooded with light from the landing window—the other looking through the vaulted palm gallery.

This gallery, though merely a passage to rooms beyond, is interesting in itself; the gray stone walls and ribbed vaulting are set off by the smart black and white squares of the marble floor, covered at intervals with red and blue rugs. One side is entirely windows which are filled with palms in green pots. The night lighting is by alabaster bowls that hang at intervals in the vaulting. At the fur-



STAIR DETAIL—RESIDENCE OF F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
Stephenson & Wheeler, Architects.

ther end is a staircase hall with a richly carved teakwood staircase in the manner of Hatfield House.

Beyond this at the north end of the house is the large dining room, which is frankly an evening and winter room. The walls are panelled for two-thirds their height in dark brown Phillipino walnut, richly carved. The upper part of the walls, the window curtains and the rug are warm crimson. This dark color scheme is relieved by the cream-white of the Caen-stone fireplace, marble torcheres, the alabaster lamps, and by the ribbed plaster ceiling, which is taken in a modified form from the ceiling of the long gallery of Knole House, Kent. At one side is a commodious serving alcove with a long built-in sideboard and two doors into the butler's pantry.

Another large room is the library, at the extreme southern end of the house, entered by only one door, and therefore

remarkably aloof and restful. Two alcove bays let in the east and west sun respectively and emphasize the charming views in both directions. These make the room T-shaped, an informal change from the usual rectangular form. The walls are in two shades of brown: the lower part of light natural teakwood, the upper part of dark red-brown stamped leather. The hangings and furniture are of a soft green, the ribbed plaster ceiling and Caen-stone fireplace giving the lighter notes. Casement windows give on to the long garden porch, which extends boldly out into the ground at right angles to the house, in the form of an arched cloister ending in an octagonal part; the whole enclosed in glass in winter and filled with flowers.

The reception room and breakfast room are both Georgian in decoration, with white panelled walls and cheerful color schemes of yellow and blues. The

formal drawing room in a transitional style with gray woodwork and grayish pink walls is the least successful room in the house.

The office or den is a comfortable room with a gilded ceiling and an interesting series of paintings of birds in light blues and greens, contrasting pleasantly with the soft red-brown teakwood panelling below them. An unusual feature is the placing of the billiard room on the top floor of the tower, where it

enjoys good views and special privacy.

Taking the house all in all, we cannot but feel that this Tudor style has not only saved it from inappropriate formality and monotony, but also given a refreshing domestic quality so rare in a house of this size. And finally we are forced to suspect that such satisfying effects could only be the result of an unusual devotion and coöperation on the part of the client, architect, decorator and builder.



TEAKWOOD SCREEN, FIRST FLOOR HALL, RESIDENCE OF F. F. BREWSTER, ESQ.,
NEW HAVEN, CONN.

Stephenson & Wheeler, Architects.



THE LIBRARY, RESIDENCE OF F. F.
BREWSTER, ESQ., NEW HAVEN, CONN.
STEPHENSON & WHEELER, ARCHITECTS.



THE RECEPTION ROOM, RESIDENCE OF
F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
STEPHENSON & WHEELER, ARCHITECTS.



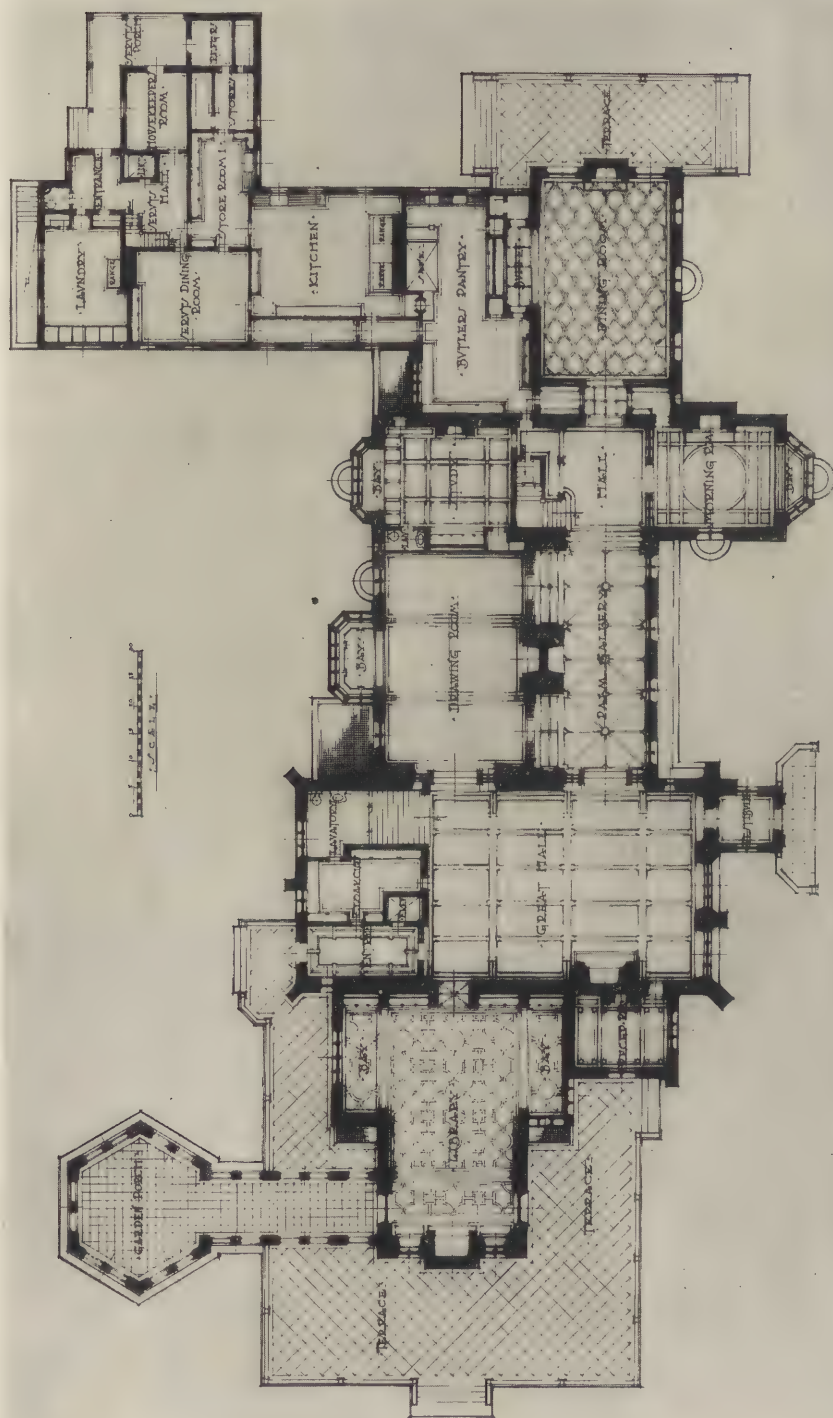
THE MORNING ROOM, RESIDENCE OF F. F.
BREWSTER, ESQ., NEW HAVEN, CONN.
STEPHENSON & WHEELER, ARCHITECTS.



MANTEL IN DINING ROOM, RESIDENCE OF
F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
STEPHENSON & WHEELER, ARCHITECTS.



ENTRANCE VESTIBULE, RESIDENCE OF
F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
STEPHENSON & WHEELER, ARCHITECTS.



FIRST FLOOR PLAN

FIRST FLOOR PLAN, RESIDENCE OF F. F. BREWSTER, ESQ., NEW HAVEN, CONN. STEPHENSON & WHEELER, ARCHITECTS.



THE GARDEN FRONT, RESIDENCE OF
F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
STEPHENSON & WHEELER, ARCHITECTS.



RESIDENCE OF F. F. BREWSTER, ESQ., NEW HAVEN,
CONN. STEPHENSON & WHEELER, ARCHITECTS.



RESIDENCE OF F. F. BREWSTER, ESQ., NEW HAVEN, CONN.
STEPHENSON & WHEELER, ARCHITECTS.



RESIDENCE OF E. W. RUSSELL,
ESO., GREENWICH, CONN.
FRANK E. NEWMAN, ARCHITECT.



From a photograph by the Owner.

A DETAIL OF THE ENTRANCE, RESIDENCE OF E. W. RUSSELL, ESQ., GREENWICH, CONN.
Frank E. Newman, Architect.

A COUNTRY HOUSE WITH AN IDEA

THE RUSSELL RESIDENCE - AT
GREENWICH, CONN.

FRANK EATON NEWMAN, ARCHITECT

By C. MATLACK PRICE
PHOTOGRAPHS BY FLOYD BAKER



IT MAY safely be said that we have become so accustomed to tolerating (and even appreciating) architecture which is of average merit, simply because it is not below average, that we have not set high enough standards for really high attainments. This is especially true in the lay criticism of country house work. To say that a house is "not bad" in its design has, unfortunately, become almost synonymous with saying that it is good.

This is not necessarily because the lay observer, or even the more trained critic, does not appreciate good work, or would

not welcome it, but rather because there is so much country house design of a character militantly offensive to good taste that the relief in beholding a house of even passable merit is so marked that the ideal is lost sight of, and the average type is accepted.

It should therefore form occasion not only for pleasant comment, but high commendation when an architect conceives and executes a country house which is an expression of individuality, good taste and architectural fitness, embodying as well those rather intangible qualities of domesticity which are most to be desired in a house of this type.

In the E. W. Russell house at Greenwich, in Connecticut, Mr. Newman, the architect, has achieved an expression of the best that is in English domestic archi-



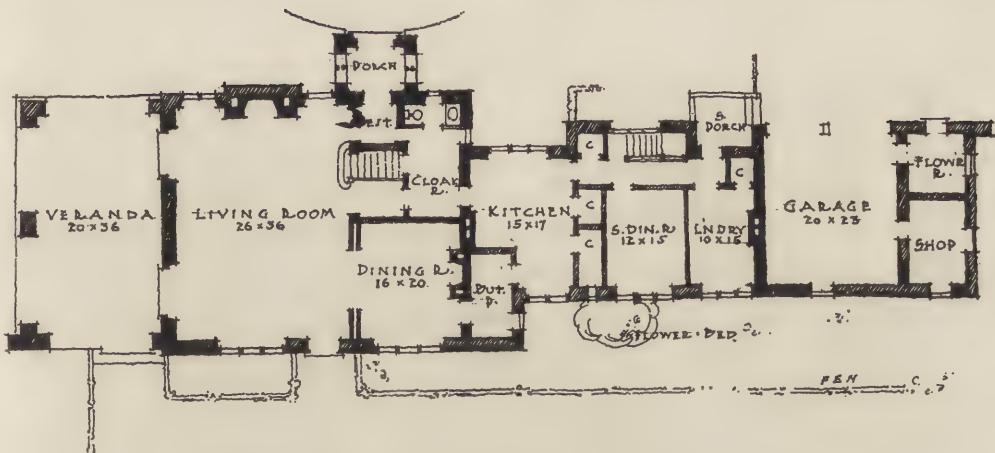
SON'S COTTAGE NORTH RIDGE

FROM A PEN DRAWING BY FRANK E. NEWMAN.

ecture to a degree of unusual success and merit in this country. One reason for this is that the architect was not experimenting—he was working with a very definite idea, and that he had accurately and minutely visualized the house is proved by the remarkable similarity between the executed work and the preliminary sketch. This circumstance has two-fold significance—Mr. Newman not

only knew exactly what he intended to do before the ground was broken, and, as the photographs testify, proceeded to do it without any material deviation from his first conception.

The style which he followed is that of the stone cottage known as the "Cotswold House," characteristic of the sheep-raising district of England lying between the rivers Severn and Thames. The



PLAN OF FIRST FLOOR

RESIDENCE OF E. W. RUSSELL, ESQ., GREENWICH, CONN.
Frank E. Newman, Architect.

type is admirably shown in Mr. Newman's pen sketch accompanying this article.

The walls of the Russell house are built of the stone taken from the old walls about the property, and the use of this material shows the admirable results that can be obtained by using material indigenous to the locality.

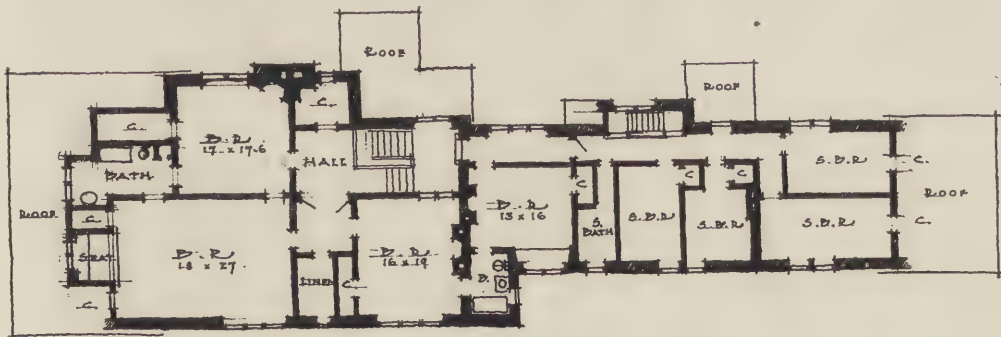
The eaves and vergeboards are rough hewn and stained a weather brown color, and the shingles are coursed unevenly and stained a similar color, giving the house an aspect of mellow age. It seems, by reason of the care and ingenuity exercised in these and like details, as though it might well be as old as the patriarchal tree which towers behind it.

From the most superficial viewpoint

one must appreciate the low, rambling roof line and the impression which the whole house creates of belonging where it stands. In this quality of local appropriateness alone it immediately surpasses most American country houses—the greater number of which would appear to belong as well in one place as in another, if, indeed, they may be said to belong anywhere.

A further appreciation of the exterior aspect of the house will be occasioned by a study of the plan, which will reveal the fact that the contour of the house is a frank and unaffected expression of its interior arrangements.

At one end is an ample sun porch, appropriately furnished with willow chairs, and a few rugs laid on brick. This gives



Second Floor Plan.

RESIDENCE OF E. W. RUSSELL, ESQ., GREENWICH, CONN.
Frank E. Newman, Architect.



From a drawing by the architect,

PRELIMINARY STUDY FOR THE RESIDENCE
OF E. W. RUSSELL, ESQ., GREENWICH, CONN.
FRANK E. NEWMAN,
ARCHITECT.



It is interesting to note the exactitude with which the architect carried out the idea of his preliminary study.

RESIDENCE OF E. W. RUSSELL,
ESQ., GREENWICH, CONN.
FRANK E. NEWMAN, ARCHITECT.

into a splendidly large living room, and the rough honesty of the exterior construction finds its counterpart here in the heavy, hand-hewn beams of the ceiling. Here is not a flimsy imitation, contrived out of thin boards and glue, feebly pretending to support the floor above, but a piece of heavy framing sturdily doing its work without pretense or apology. A long bank of books—the best furniture known—fills the space between the two French windows to the porch, and another wall is dominated by a generously proportioned fireplace, designed to take four-foot sticks, and suggestive of crisp fall or cold winter nights, which the sturdy stone walls of this house should well withstand.

From this great low-ceiled living room opens into the dining room, with the kitchen, servants' dining room and laundry beyond. The extreme end of the

house is occupied by the garage, with a shop and tool shed. The garage opens to the rear of the house, and is taken in by the ample roof of the main house. Certainly here is an apt and ingenious device which should afford suggestion of other applications.

In the second floor all possible advantage is taken of the long, rambling plan to effect an interesting and practical arrangement.

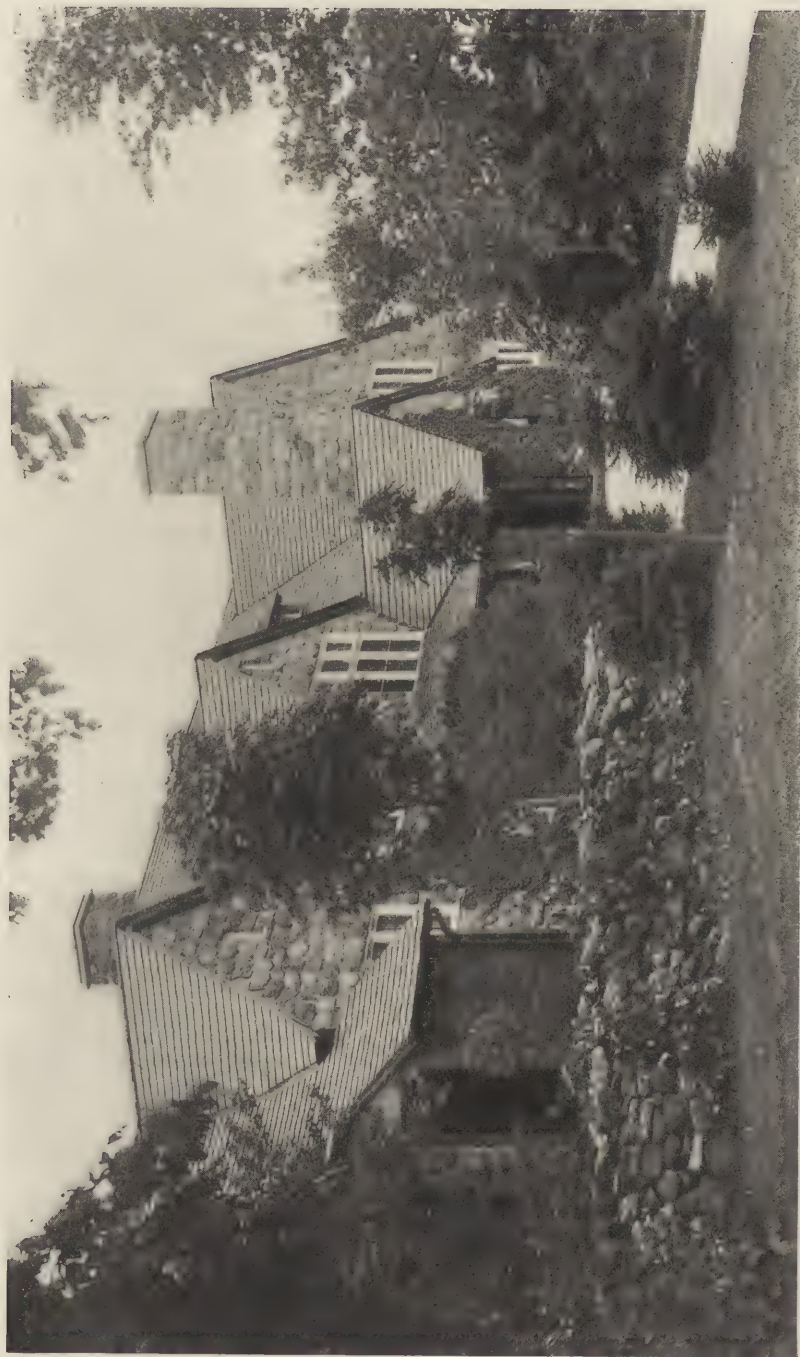
In all, one would reckon it safe to say that here is a house without reproaches or regrets—one of which owner and architect must well be proud, in that the one has a dwelling which will endure to posterity and become a place of warm and intimate association, and the other has sincerely created an American country house on American soil with all the subtle picturesque charm that English ideals can afford.



THE SUN PARLOR—RESIDENCE OF E. W. RUSSELL, ESQ., GREENWICH, CONN.
Frank E. Newman, Architect.



THE LIVING ROOM—RESIDENCE OF E. W.
RUSSELL, ESQ., GREENWICH, CONN.
FRANK E. NEWMAN, ARCHITECT.



DETAIL—RESIDENCE OF E. W. RUSSELL,
ESQ., GREENWICH, CONN.
FRANK E. NEWMAN, ARCHITECT.



ENTRANCE—RESIDENCE OF E. W.
RUSSELL, ESQ., GREENWICH, CONN.
FRANK E. NEWMAN, ARCHITECT.



ENTRANCE, COUNTRY HOUSE AT GREAT NECK, L. I.
Wilson Eyre & McIlvaine, Architects.



THE GARDEN FRONT, COUNTRY HOUSE AT GREAT NECK, L. I.
Wilson Eyre & McIlvaine, Architects.

THE
ELEMENT
OF THE
PICTURESQUE
A COUNTRY HOUSE
AT GREAT NECK, L.I.
WILSON EYRE & McILVAINE
ARCHITECTS...



AS AN exponent of the picturesque in country house architecture, Wilson Eyre is far too well known to need introduction here, even to the lay reader.

It cannot fail to be interesting, however, to make a few notes on certain details of a house at Great Neck,

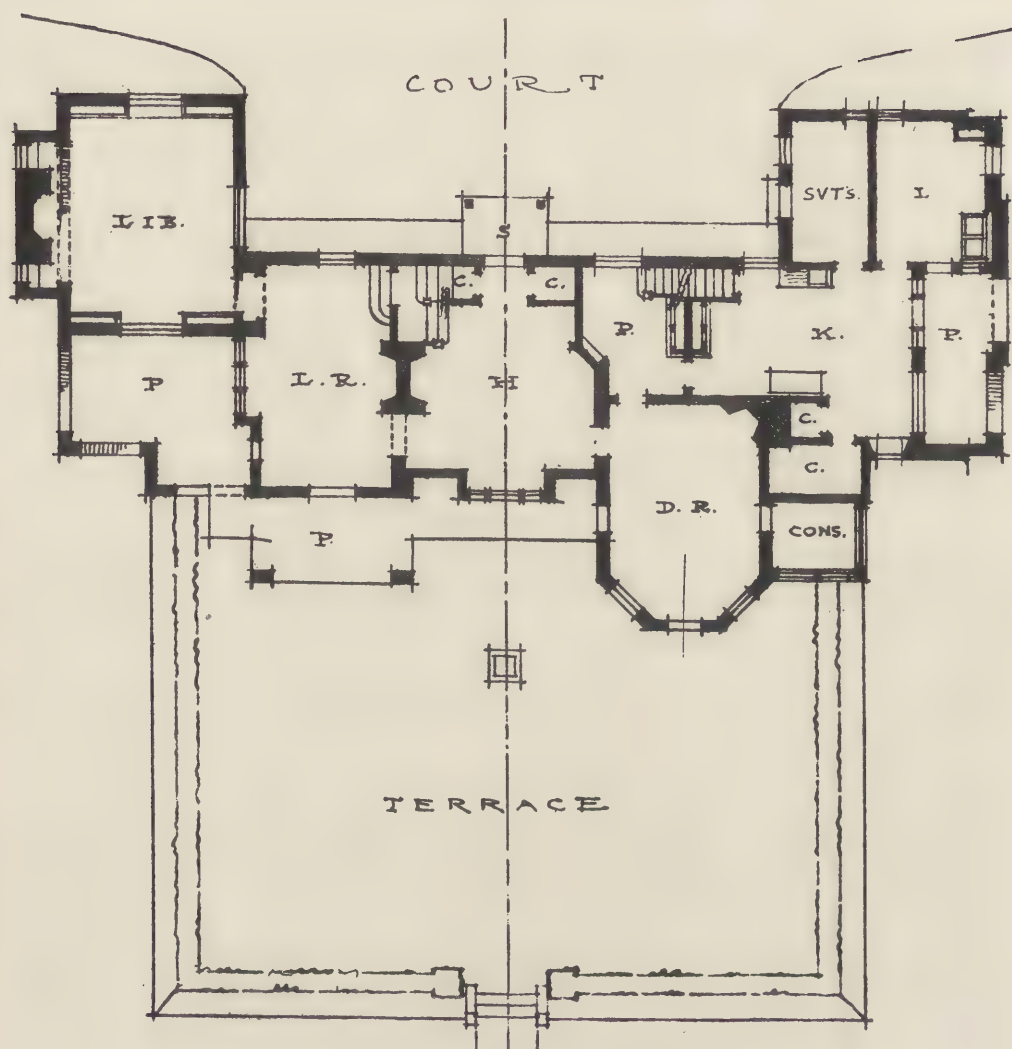
on Long Island—a house in which the details as well as the general characteristics contribute to that quality of the picturesque so generally lacking in most domestic architecture in this country.

The original house was built on a plot of some eight or ten acres, with gardens extending down to the shores of Little Neck Bay. The exterior scheme consisted of a dark, rough brick foundation carried to the window sill height, with stucco walls above.

Some years after the erection of this house the flanking wings were added, including the library with a porch and ad-



THE GARDEN FRONT, COUNTRY HOUSE AT GREAT NECK, L. I.
Wilson Eyre & McIlvaine, Architects.



PLAN OF COUNTRY HOUSE AT GREAT NECK, L. I.
Wilson Eyre & McIlvaine, Architects.

ditional bedrooms at one end, and larger kitchen quarters, including maids' rooms, at the other end.

The walls of the addition are of masonry, stuccoed with cream-colored stucco, the brick base-course being carried around at the existing level, with wide mortar joints. A timbered balcony opens from the second floor bedrooms. The chimneys are of brick, stuccoed, topping out with dark brick cap to match the base of the house, and finished with terra-cotta chimney pots of the same texture.

The roof is covered with old "pan-

tiles" of varying colors, ranging from light red to dark brown. These were removed from an old building in England, and were brought over for use on this house.

All the exterior wood trim, such as timbered posts, eaves, barge-boards, brackets and the like of chestnut, stained and weathered, while the window sash are painted cream-colored, with gray-green shutters.

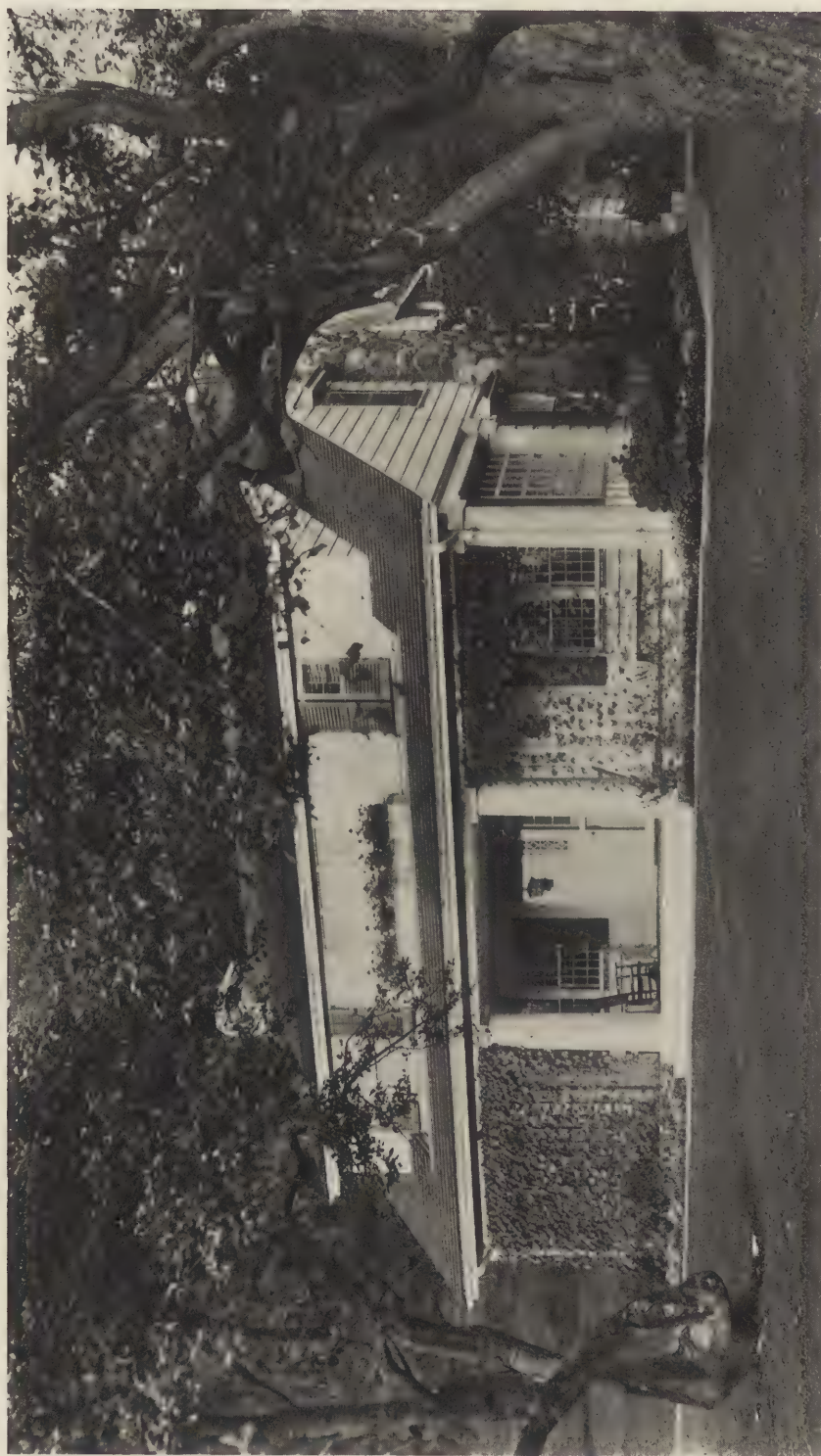
The planting about the house is not only interesting in itself, but worthy of study because of its success in enhancing the house. The trees lining the drive

are Lombardy poplars, the hedges are California privet. The walls of the north, or approach side of the house are covered with English ivy, the south side, facing the garden, being covered with American ampelopsis.

As in the case of all country house design, however, it is not the color scheme, or the materials, or the plan in *themselves* that produce a whole of such compelling charm as this house at Great Neck. Every element of the problem must be brought into co-relation and harmony, and above all must be sympathetically studied in every small detail, yet with such a degree of solidity as to avoid any appearance of being over-studied. To this is due, in a large measure, that unique quality in Mr. Eyre's work which enables one to recognize it at sight, and always with abiding pleasure.



THE APPROACH, COUNTRY HOUSE AT GREAT NECK, L. I.
WILSON EYRE & McILVAINE, ARCHITECTS.



A COTTAGE IN WESTCHESTER COUNTY.
ARTHUR T. REMICK, ARCHITECT.
(See page 311 for Plans.)



RESIDENCE OF ARTHUR W. WOOD, ESQ., ARDSLEY, N. Y.
Arthur T. Remick, Architect.

THREE COTTAGES & A STUDIO

RECENT WORK OF
ARTHUR T. REMICK

BY

ALWYN T. COVELL



ARCHITECTURAL design sometimes reminds one a little of the Biblical servants who were given the "talents," the good architect being he who, like the "good and faithful servant," has made much out of little—in other words,

who has successfully designed a small house.

For the small house is hedged about with countless limitations, and at every turn the architect is confronted by restrictions either in the matter of size or of cost. That an architect can ably design a small house should by no means be taken to imply that he cannot, with equal, or even greater success, achieve a large house. Among those architects,

however, who confine their efforts and attention almost entirely to large houses, I have known many who shake their heads at the mere mention of "small house," and say they would not be in any unseemly haste to try it.

The reasons for this are by no means obscure. The painstaking care and study which must go into a *really well-designed* small house are not, unfortunately, paid for even at the maximum percentage of ten per cent. on the total cost. If an architect, or a plan-fabricator styling himself an architect, is willing to "tear off" plans without thought or study, without careful detailing and a good deal of abstract artistry applied to the whole undertaking, he can show a fair margin of profit even on a five or six thousand dollar house.

With the conscientious architect, however, it is very different. He knows in

the first place that if he takes the work he will, for the sake of his reputation, turn out a thoroughly creditable job, and will spend more care and time upon it than he will be paid for, considering, of course, the loss he will suffer as well in being distracted from larger and more remunerative work.

Therefore, it is fortunate not only for the "small house" reputation of the profession, but for the chances of the home seeker as well that there are a few architects who specialize in houses of moderate cost, and who produce really good work. There are very few architects in this class, because there are very few (no matter how interested they may be in the small house as an architectural problem) who have the knack of making it pay.

Among the small number of architects who have shown their ability in larger work, but who, fortunately for the home seeking public, have built up solid reputations as designers of good moderate

cost houses, is Arthur T. Remick, from whose office there are shown here three cottages and studio. The studio is one of many buildings on a vast country estate, but is included here because it illustrates an unusually happy solution and treatment of the "house-on-a-hill" problem.

Of the cottages, the residence for Mr. Wood at Ardsley is an unaffected modernized adaptation of the Dutch Colonial type, sane and pleasing inside and out.

Mr. Remick generally contrives to make very large rooms in comparatively small houses. Thus the plans of Mr. Wood's house show a remarkably generous living room, which, taken with the hall (which is really part of it) occupies a little over half of the entire area of the first floor. Nor is the dining room by any means small—and the kitchen is large enough. With such a living room, however, with windows on three sides, one could not complain of feeling constrained for room.



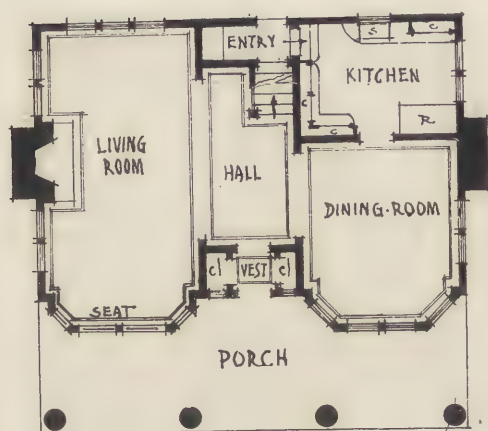
THE LIVING ROOM, TOWARD DINING ROOM, RESIDENCE OF A. W. WOOD, ESQ., ARDSLEY, N. Y.
Arthur T. Remick, Architect.



THE LIVING ROOM, RESIDENCE OF ARTHUR W. WOOD, ESQ., ARDSLEY, N. Y.
Arthur T. Remick, Architect.



RESIDENCE OF ARTHUR W. WOOD, ESQ., ARDSLEY, N. Y.
Arthur T. Remick, Architect.



First Floor Plan.

RESIDENCE OF ARTHUR W. WOOD, ESQ.,
ARDSLEY, N. Y.

Arthur T. Remick, Architect.

Returning to the exterior, the architect has succeeded in effecting a solid-looking house—there is nothing unstudied about it, and certainly there is an inviting air of domesticity in its appearance that would seem not to have been included in the specifications of many much larger and more pretentious houses.

The residence for Mr. Don M. Parker is not remarkable at first glance, being very quiet and unassuming as to its exterior, but of astonishing ingenuity in plan. In a house by no means large, and in shape very nearly square, Mr. Remick has actually succeeded in giving an impression of the interesting, rambling plan of an English country house.

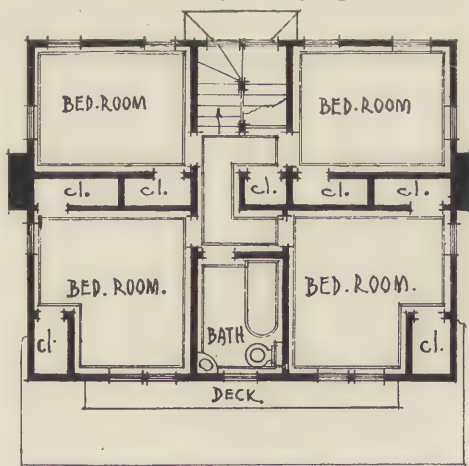
The hall gives to the right into a fair sized living room, with beamed ceiling, and this, by reason of the skilful treatment of the "ingle-nook," seems to wind around in an informal manner which the exterior aspect of the house would brand as almost impossible, and certainly quite unexpected. The secret is that, instead of a stupid clutter of doors (which only serve to remind us how small our rooms are) Mr. Remick has swept everything away, and, utilizing the full depth of the house, dextrously thrown dining room and living room into one, at the same time keeping them distinctly separate. To appreciate the in-

genuity of this is to appreciate the difference between a small house which is designed by an architect and one which is done from plans at so much per set, or culled from the pages of that type of deluding literature which I have heard aptly called "Homes in a Hurry."

The "Cottage in Westchester," one of several on an estate, is another interesting example of Mr. Remick's version of the small house, and though the plan was devised to meet certain specific requirements, the exterior is thoroughly charming, and interesting in that the front and side elevations are so entirely different in the impression that they give. From the front one fancies that the front is the long dimension of the house. From the side, however, one perceives that such is not the case, and that a long wing has been devised in such a manner as to play no part in the front elevation.

A most interesting study is the picturesque little studio building, placed on a steep hillside. Its treatment is full of suggestion, and its planning well repays a careful study of the grades as shown in the photographs, and the manner in which the building adjusts itself to these grades.

It is a little hard to know which to call the "first floor." As the plans indicate, the entrance is on the up-hill side, which is attractively low-lying like a bun-



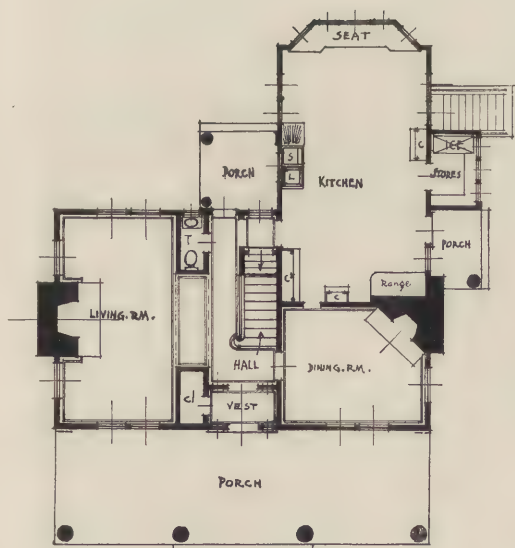
Second Floor Plan.

RESIDENCE OF ARTHUR W. WOOD, ESQ.,
ARDSLEY, N. Y.

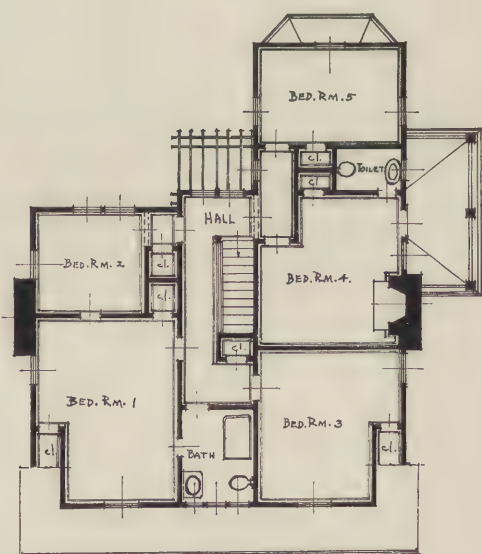
Arthur T. Remick, Architect.



A COTTAGE IN WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.



First Floor Plan.

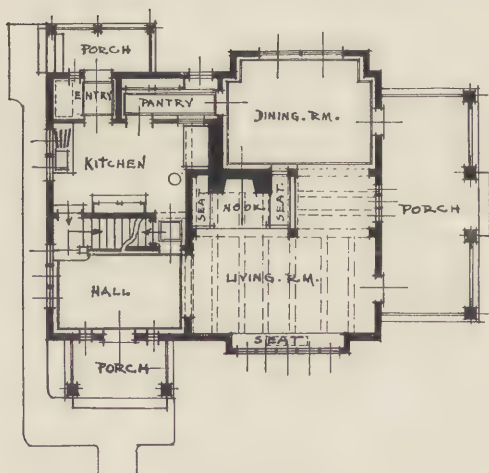


Second Floor Plan.

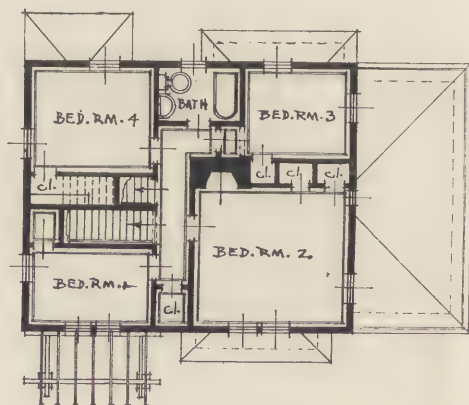
A COTTAGE IN WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.



RESIDENCE OF DON M. PARKER, ESQ., GARDEN CITY, L. I.
Arthur T. Remick, Architect.



First Floor Plan.



Second Floor Plan.

RESIDENCE OF DON M. PARKER, ESQ., GARDEN CITY, L. I.
Arthur T. Remick, Architect.

galow. Almost at the building the path of approach forks, and leads, to the left, directly into the recreation room and the more secluded work room. From the recreation room, in which there is an open fireplace, two balconies look down

into the great two-story studio itself. A flight of stairs lead down to the lower floor.

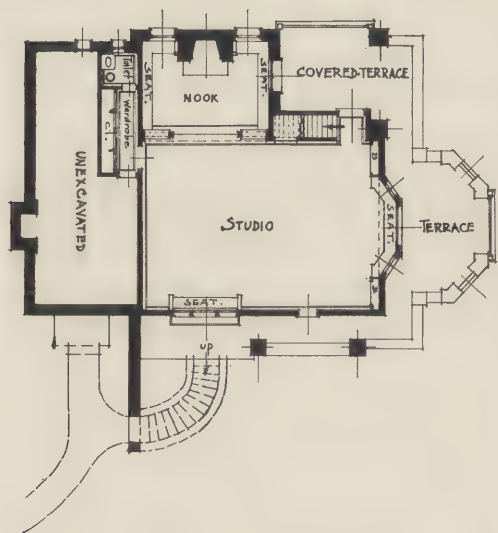
Returning to the park (shown in the plans), the right fork leads down a flight of stone steps, through a retaining wall,



TWO VIEWS OF THE LIVING ROOM, RESIDENCE OF DON M. PARKER, ESQ.,
GARDEN CITY, L. I.
Arthur T. Remick, Architect.



A STUDIO IN WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.



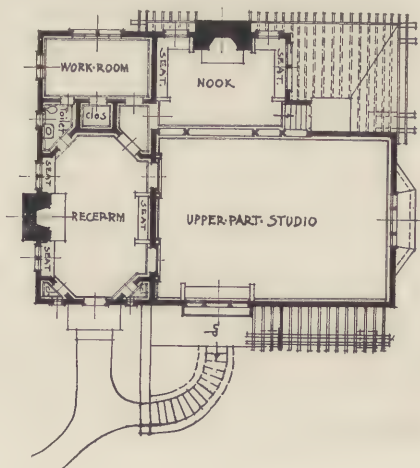
FIRST FLOOR PLAN OF THE STUDIO.

to a terrace, which runs partly around three sides of the studio. At this terrace level a door admits to the studio, an excellently interesting room for an informal interior of its kind.

The character of the field stone work in this hillside studio is most successfully carried out. The mortar joints have been well raked, and the stones intelligently laid up, albeit by dint of rigorous and

painstaking supervision of the masons by the architect.

These few examples—three cottages and a studio—will certainly serve to illustrate a statement made above, that it is indeed fortunate that there are a few architects who still interest themselves in the "small house" problem, and the illustration should bear silent but potent testimony as well to the regrettable fact of how seldom this sort of thing is done even nearly so well.



SECOND FLOOR PLAN OF THE STUDIO.



FROM THE UP-HILL SIDE—STUDIO IN WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.



INTERIOR—STUDIO IN WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.



FROM THE DOWN-HILL SIDE—STUDIO IN WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.



DETAIL OF THE TERRACE—STUDIO IN WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.



INTERIOR—STUDIO IN WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.



THE ENTRANCE—STUDIO IN WESTCHESTER COUNTY, N. Y.
Arthur T. Remick, Architect.



RESIDENCE OF JULES BREU-
CHAUD, ESQ., ULSTER CO., N. Y.
MYRON S. TELLER, ARCHITECT.



RESIDENCE OF JULES BREUCHAUD, ESQ., ULSTER CO., N. Y.
Myron S. Teller, Architect.

A STUDY IN LOCAL ADAPTATION

A NEW-OLD DUTCH COLONIAL
FARM-HOUSE IN THE CATSKILLS

MYRON S. TELLER ARCHITECT

BY

DAVID E. TARN.



AN INTERESTING country house to consider as an example of success in local adaptation is that of Jules Breuchaud, Esq., Myron S. Teller, architect. This house is located in Ulster County, New York, in the Catskills, at the foot of High Mountain, and over-

looking the valley which will soon be inundated with water for New York City's new reservoir.

Typical of the old Dutch farmhouses met with in Ulster County, the Breuchaud house is, in the main, a production of natural local resources. Certainly the style is eminently appropriate—one which undeniably belongs to the site, and this appropriateness is expressed in local materials as well, making the whole rather

an unusual example of American country house design.

There are marked qualities of simplicity, sincerity and directness in the manner in which there has been attained that most elusive yet most desirable of all qualities in a country house—the pervading sense of domesticity.

A few notes upon the design and construction of this clever adaptation cannot fail to possess marked interest.

The stone in the walls of the main house, the terrace, and the foundations were taken from quarries and stone walls on the place, affording considerable range in the soft browns, greys, blues and greens resulting from variety of stones—the weathered faces of the field stones contrasting with the fresher quarry-seam faces, some of which sparkle with quartz. The pointing is in a light color lime and cement mortar, raked back of the face line of the stone work. The stones were



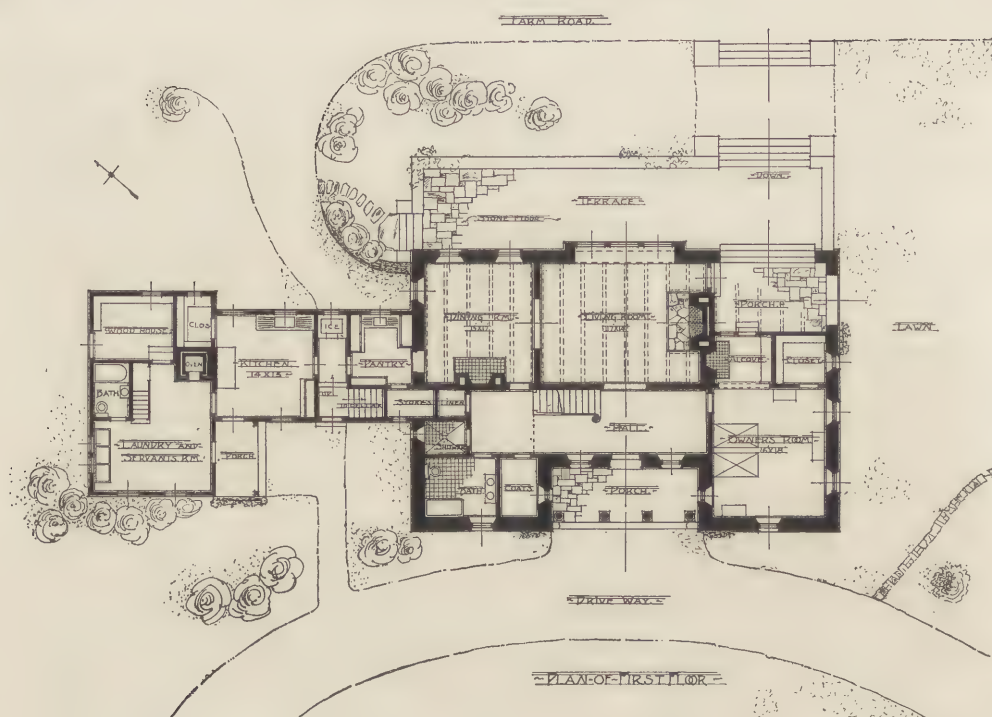
RESIDENCE OF JULES BREUCHAUD, ESQ., ULSTER CO., N. Y.
Myron S. Teller, Architect.



DETAIL OF WING, RESIDENCE OF JULES BREUCHAUD, ESQ., ULSTER CO., N. Y.
Myron S. Teller, Architect.



ENTRANCE DETAIL, RESIDENCE OF JULES
BREUCHAUD, ESQ.,
ULSTER CO., N. Y.
MYRON S. TELLER,
ARCHITECT.

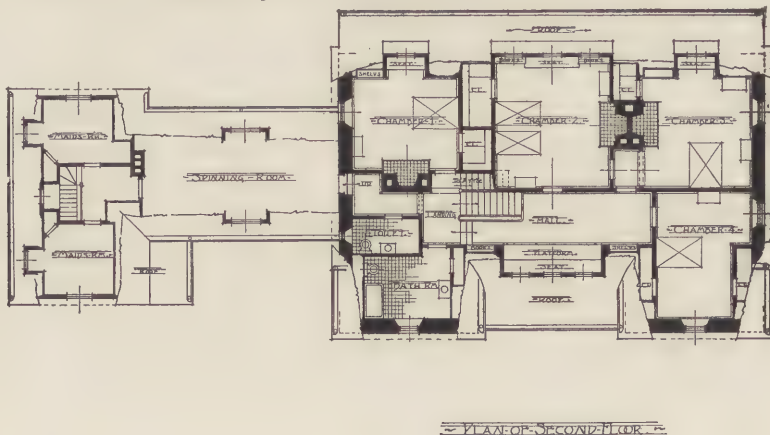


RESIDENCE OF JULES BREUCHAUD, ESQ., ULSTER CO., N. Y.
Myron S. Teller, Architect.

selected with care, every effort being made to have the masons lay them without the usual squaring of ends and edges, the pointing following the general contour of each stone.

It is interesting to note that the architect has stopped the masonry at the heads of the windows in the peaks of the small gables, finishing them off with clapboarding and therein faithfully follow-

ing local precedent. The origin of this quaint structural detail in the local early Dutch houses lies probably in the saving of labor of cutting and fitting the stones in the small angle, as well as eliminating the weight of the stone over the window. In the main gable the stone has been carried to the peak, and the attic fan-light window arched in with rough stone.





DETAIL OF TERRACE, RESIDENCE OF JULES BREUCHAUD, ESQ., ULSTER CO., N. Y.
Myron S. Teller, Architect.

Some of the oak beams and lintels used in the house are from older buildings, and have been hewn and dressed by hand, but most interesting of all details is the hardware.

It was the aim of both owner and architect to maintain the original simplicity of the early Dutch Colonial type as much as possible, and in as many details, hence an extensive collection of old hand-wrought hardware in the possession of the architect formed a good working basis from which the latches, hinges and other metal work were copied, and hammered out by hand, as of old, at the local smithy. The hospitable old Dutch door, where you have opened the upper half with the latch handle that always hung out, and then reached over to lift the latch of the lower half—these bits of hardware have their place in all the outside doors, while the interiors have their primitive thumb-latch and sliding bolt.

The style of the earliest American carpenters was followed in many of these doors, which present their panelled sides to the main rooms and halls and their flush, or "button bead," panels to the chambers and closets. Other doors in the service wing are made up simply of various widths of boards, with cross-battens nailed and clinched.

The window frames and sills are fastened at the corners with oak pins, the sills being also of oak, with no stone used either for these or for the lintels. The shutters for the main house are panelled on one side and flush on the back, pierced with a crescent in the top panel and fastened back to the wall with wrought iron "S" catches, driven into the stone wall. Others are fastened with a long wrought iron hook dropped into a staple driven into the face of the wall. The shutters of the frame wing are simply made of boards, varying in width,



LIVING ROOM, RESIDENCE OF JULES
BREUCHAUD, ESQ., ULSTER CO., N. Y.
MYRON S. TELLER, ARCHITECT.



ENTRANCE HALL, RESIDENCE OF JULES BREUCHAUD, ESQ., ULSTER CO., N. Y.
Myron S. Teller, Architect.

with cross battens nailed and clinched. The house is approached from the southwest, through an entrance flanked with stone posts in a wall of masonry in keeping with the house.

The general aspect of the house at once bespeaks comfort and a suggestion that it is a home as well as a house. The service wing is built at the end, and is of frame construction, with wide clapboarding, entirely in character with the old Dutch houses of the locality. In these early farmhouses it was often the custom to build such a wing at some time subsequent to the erection of the house itself, as the family prospered or enlarged.

Although the general setting of the house seems a little lacking in trees, the small cedars, the fan-shaped lattices, the stepping stones, and the young shrubbery add their share of interest, and promise an adequate environment in the space of a few years.

The entrance porch is sheltered between the two stone gables, where the

main roof sweeps low to cover and shelter the front door. Here the white cornice and turned wood columns afford an effective contrast with the darker stone, and emphasize the entrance.

Entering the hall the visitor is greeted by simple and very livable home surroundings—the low, plastered ceiling and plain side walls, deep window recesses, with splayed and panelled jambs and wide oaken floor boards, their hardness and solidity denoted by the ripple left by the carpenter's plane.

The stair, with white turned balusters, capped with a smooth round hand rail, reaches down and ends in a spiral over the newel post at the foot.

A wide door opens into the living room, where the massive ceiling beams are exposed, and the floor boards above form the ceiling. A broad casement fills one side of the room, and overlooks the valley of Ashokan. An interesting and cheerful fireplace constitutes itself more or less the keynote of the room—ample in proportion, to burn real logs of size,



BEDROOM, RESIDENCE OF JULES BREUCHAUD, ESQ., ULSTER CO., N. Y.
Myron S. Teller, Architect.



DINING ROOM, RESIDENCE OF JULES BREUCHAUD, ESQ., ULSTER CO., N. Y.
Myron S. Teller, Architect.



SECOND FLOOR STAIR HALL, RESIDENCE OF JULES BREUCHAUD, ESQ., ULSTER CO., N. Y.
Myron S. Teller, Architect.

and detailed with remarkable sympathy in the vein of early Dutch Colonial prototypes.

A pleasant sense of space is felt on the first floor, and a sense of charming simplicity throughout the house.

In the service wing there are ample store rooms, a pantry, a large kitchen and laundry, with modern conveniences, however, such as would have bewildered the housewife of an early Dutch settler. She would recognize, however, as quite familiar, the woodshed and the brick oven built in the side of the chimney, and of such proportions as to roast the pig at Yule tide. The maids' rooms on

the second floor are comfortable and airy, occupying the gable ends, and access is had to the main house on this floor through the spinning room, which serves as a passage.

Certainly Mr. Teller is to be congratulated upon having achieved a unique architectural expression, and in designing an adaptation of a local type which rings true. In this, it is reasonably certain, he could not have attained such a happy success had he not been very studious in his attention to the subtlest details, and very sincere in his love for the house he was building and the style in which he was building it.



BEDROOM, RESIDENCE OF JULES BREUCHAUD, ESQ., ULSTER CO., N. Y.
Myron S. Teller, Architect.



LIVING ROOM MANTEL, RESIDENCE OF JULES BREUCHAUD, ESQ., ULSTER CO., N. Y.
Myron S. Teller, Architect.



A CHEST OF WHICH ALL THE IRON FITMENTS ARE ACTUAL EXAMPLES OF EARLY DUTCH COLONIAL HARDWARE.

SOME EARLY AMERICAN HARDWARE

AN INTERESTING COLLECTION
OF DUTCH-COLONIAL EXAMPLES

BY

Dr. GEORGE W. NASH



NOWADAYS we are apt to look upon a hinge as merely a butt upon which to hang a door and a door-handle as merely a door-knob, by which to open it, but our Dutch forefathers evidently acting on the principle that the useful could be combined with the

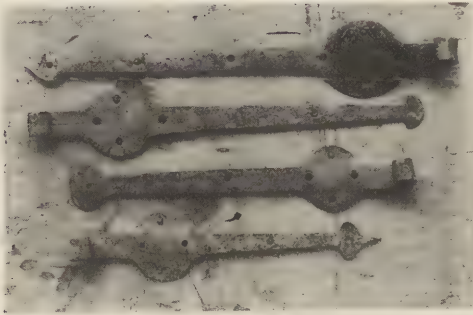
ornamental, developed many quaint pieces of builder's hardware, some of which may still be seen fitting appropriately the old time houses in which they are found.

The old time hinges for heavy doors are all more or less modeled on the same type; a long flat bar of wrought iron, hanging on a thumb; the plainer hinges are merely pointed at the end, while others are hammered out into a circle near

the eye that fits over the thumb and at the end are shaped into a half moon or into an arrow like point. These hinges may be utilized nowadays simply as an ornament, especially on the plain doors of the Catskill country, as is seen in the Dutch door illustration; the eyes are cut off and the hinges then nailed on the outside of the door; in this way they break up the exceeding plainness of the door itself.

(Speaking of butts; a neighboring house has something unique in this line; this butt dates back many years, when the house was put in order. The division lines on the butt, instead of being horizontal, are made in a spiral, so that, when the door is opened, it swings upward thus raising it from the floor; when closed the door falls easily down into place with no difficulty.)

The author has utilized these old hinges in making an "old" iron bound



OLD DUTCH STRAP HINGES.

chest. With the exception of the plates for the locks all the iron work on this chest is composed of old wrought iron hinges and door handles as may be easily noticed in the photograph. The woodwork has been treated with a thin coat of walnut stain, which gives it "that old-time appearance." Visitors,

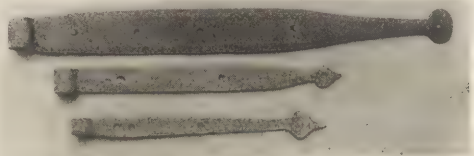


AN OLD TYPE OF T-HINGE.

on seeing it, frequently exclaim "Where did you get that old chest?" When the cover is raised, however, the tell-tale appearance of modern lumber plainly shows the clever imitation. By the way, the nail heads showing in the picture are only dummies covering up good honest screws underneath.

Shutter hinges vary; sometimes these hinges are merely plain straps with an eye at one end fitting over the thumb; sometimes they are like those mentioned above with a circle near the thumb and frequently an angular affair may be seen; these latter are very common in my own neighborhood.

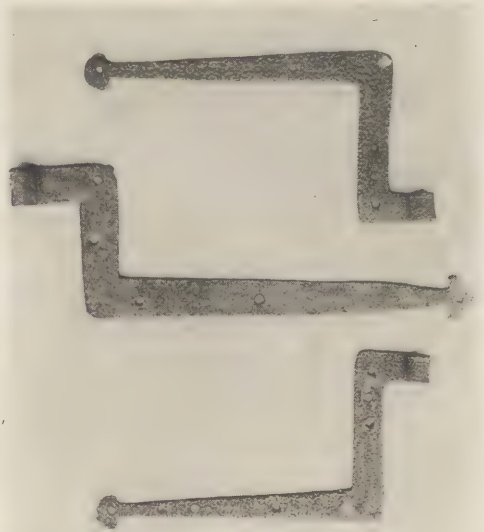
The angle-shaped hinges are also seen on inside doors, with the arm placed over a panel in the door; often, however, we find simply a plainer pattern with no projecting arm as may be seen in the illustration. The trouble with these inside hinges is that, in the course of years, they will wear out, thus allowing the door to sag; this was corrected by the people of the early days, by sawing off a strip from the bottom of the door and nailing a similar strip, called a Dutchman, on the top. Of course, in



OLD DUTCH DOOR HINGES.

time, there had to be an end to this and butts were used to hang the doors.

In order, however, to preserve this old time appearance, the author gathers up everywhere all such hinges, whole or broken, and uses them in connection with modern hinges or butts; by a little filing the flat surfaces are made to fit snugly up against the butts and then nailed



THREE EARLY DUTCH SHUTTER HINGES.



TWO EXAMPLES OF EARLY DUTCH DOOR
KNOCKERS OF HAND WROUGHT IRON.



FOUR INTERESTING EXAMPLES OF INSIDE DOOR HINGE FROM EARLY DUTCH
COLONIAL FARM HOUSES.



AN OLD DUTCH DOOR, SHOWING HINGES, LATCHES AND BOLT.

fast with old, blacksmith made nails; in this manner the old-time appearance is easily effected with a more durable hinge.

As to door handles: for outer doors, the old Dutch builders made use of a combination knocker and handle that was extremely practical; the handle that lifted the latch could be used as a knocker. A few of these are yet to be found. As seen from the outside, it consists of an oval ring of wrought iron attached loosely at the top to a tongue coming through the door from the inside; at the bottom of this ring is a knob of iron, sometimes square, sometimes round, while sometimes it is merely a button at the back of the lower part of the ring, which striking against a plate, which may be square, round or heart-shaped, gives warning within of the caller at the door. On the inside of the door, the tongue from the outside ring is attached to a lever that controls the latch. With the Dutch half doors, the lower section has only the inside contrivance. These handles may also be seen on inside doors

only here there is no knocker arrangement, the ring being left plain and smooth.

Then we have the thumb latches of various degrees of elaborateness, from the ornate affair on an outer door to that on the cellar door.

A lift latch differs but little from a thumb latch; the tongue running through the door is very short just reaching the latch bar, leaving no room for grasping with the fingers; in order to lift the latch here, a button was placed on the latch bar or the end of the bar was bent around on itself, either contrivance thus giving an easy opportunity to raise the latch as wished.

Another pattern of door latch is not so common but is occasionally seen; this latch would seem to be the original of the modern Arts and Crafts designs. The mechanism, controlled by a brass handle is easily understood.

An interesting circumstance connected with the old Dutch hardware found here is that a gentleman from Holland, visiting this section some years ago, on noticing this hardware made the remark that patterns exactly like it may still be found in the older farm houses of Holland.

Although not properly Dutch, four illustrations are introduced here for their quaintness. The wooden hinges from an old building in Pennsylvania need no comment. The old wrought iron knocker, also from Pennsylvania, speaks for itself. The oddly contrived door latch from the same place could be well reproduced in brass for a present day house. The unique bolt from Van Cortlandt Museum, New York City, is certainly deserving of mention here. This bolt or catch is made of brass and furnishes quite an ornament to the door; the mechanism is simple; the upright rod slides up and down in its sockets; the side bar drops into a slot in this rod and the door is fastened.

Endeavor has been made to show only main types of hardware. The many modifications still to be seen hereabouts show the ingenuity and skill of the individual craftsman who developed his hardware at his own forge.



SEVEN EXAMPLES OF EARLY AMERICAN HARDWARE.

(E) Is published by kind permission of the Colonial Dames of New York.

(A) A Door Knocker from Pennsylvania. (B) An old Dutch Door Latch with brass handle. (C) Old Dutch Thumb-Latch. (D) Pennsylvania Dutch Door Latch. (E) Old Dutch Door Bolt at the Van Cortlandt Museum. (F) Wooden Hinges, Pennsylvania. (G) Old Dutch Thumb-Latch.



TWO COTTAGES AT VILLA NOVA, PA.
Aymar Embury II, Architect.

A PAIR OF COTTAGES AT VILLA NOVA, PA., AYMAR EMBURY II, ARCHITECT.

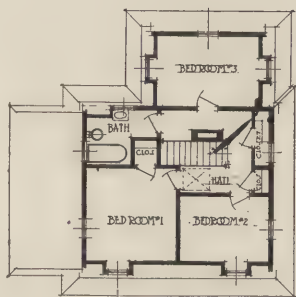


It may be that exaggeration is a national characteristic of this country — exaggeration in personal fortunes, in the cost of living, in general ostentation and in ideals at large. Certainly this is true in phraseology. The term “villa” lost any meaning it might have had in this country when it became the characterization of the multi-million dollar palaces of Newport. One estimable lady is recorded as speaking, in an ultra blasé manner, of her little *pied-a-terre* in the country, alluding to a house which must have cost a good many hundred thousands of dollars to build, apart from its setting in about a hundred and fifty acres of elaborately parked grounds. And even some of our “country gentlemen” who disdain so extreme an idiocy

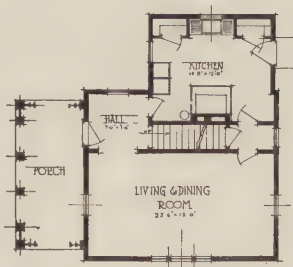
of misrepresentation see no unfitness in speaking of their “little places” up in the Berkshires, or where-not, when they honestly mean enormous and expensive estates, adorned with palatial homes and honestly know that theirs is not a “little place.” Little perhaps, on the map of the United States, but vast in comparison to the “thirty-by-a-hundred” lot of the aspiring suburbanite, the architectural extent of whose house is often governed by the amount he is able to mortgage the lot for. We lose sight of comparisons, and speak of the “house of moderate cost” without stopping to seriously consider what we mean by “moderate.” Fifteen or twenty thousand dollars is a moderate cost for a house in comparison to a hundred thousand, but to how many is even such a “moderate cost” entirely prohibitive? It is misleading to speak of a ten or fifteen thousand dollar house as “moderate” in cost unless we keep constantly in mind what we are comparing it with. The



TWO COTTAGES AT VILLA NOVA, PA.
Aymar Embury II, Architect.



FIRST AND
SECOND FLOOR
PLANS, COT-
TAGES AT VILLA
NOVA, PA.
Aymar Embury II,
Architect.



an illustration of our tendency to exaggerate, either up or down.

Aymar Embury II, has long been known as displaying a remarkable degree of cleverness in his rendering of the very small house—which, incidentally has given rise to a popular and mistaken impression that he does not design large houses. This impression is by way of being an illustration of the axiom that people generally see only the thing they are looking for. An eminent lawyer might paint a remarkable picture, but were it never so clever, his friends would consider only his legal achievements. And similarly they might not be likely to associate Mr. Embury, at first glance, with the large and pleasantly designed house which he has recently done for Mr. Rupert Hughes, while they would be ready to stake their reputations as architectural critics that the pair of cottages illustrated here emanated from Mr. Embury's office.

word "moderate" alone is meaningless and deceptive. To call a ten or fifteen thousand dollar house a "cottage" is also misleading. A cottage suggests simplicity. In Europe it suggests peasantry and tenantry. Why, then, should we mis-term a comparatively large and substantial residence a "cottage"? It is only

The instructive feature of these two cottages at Villa Nova lies in the fact that the first pleasant impression received upon seeing them is commensurate with that received upon seeing a much more expensive class of house. These were built for a little over four



DETAIL OF LATTICE, COTTAGES AT VILLA NOVA, PA.
Aymar Embury II, Architect.

thousand dollars each, which, in the present day of high building costs, may be reckoned as very nearly a bottom figure for anything but a small bungalow.

Building costs have risen so in the last ten years that the "moderate cost" house of a decade ago is a pretty expensive proposition today, and a cottage of the type of these two at Villa Nova represents very nearly the most that can be done for the money.

In point of plan, there is to be observed the present day tendency to attain, at any cost, one or two really large rooms on the first floor, and to minimize all necessary partitions and doors. The total area of the floors, is, of course, so small that there was afforded but little opportunity for spacious rooms, either up or down stairs, though one can conceive that these little cottages, attractively furnished with "cottage furniture" in simple good taste, may well be more than merely "livable."

The same plan, reversed, has been used in both houses, and looking up at their pleasantly quaint profile from the road, the most casual and careless ob-

server must feel their remote difference from the hurried "homes" plucked from the jumbled leaves of a "plan book" of ready-made houses, which possess, usually, somewhat less distinction than ready-made clothes.

If there were not other and ample evidence in the general aspect of the houses to prove that an able architect had designed them, the detail of the service-yard lattice would prove it alone. There is a grace and fitness—almost an architectural aristocracy about the manner in which this humble adjunct to the detached dwelling is handled which bespeaks a sympathetic hand.

So here are two real cottages—real American cottages, furthermore, since their prototype is our own native "Dutch Colonial," and they are presented in these pages not only as a tribute to Mr. Embury's admirable ingenuity in this direction, but as an object lesson in the fact that much may be done with little, and that with a clever architect, the success of the finished work need not be measured by the amount of money his client expects him to spend.—

C. M. P.



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RESIDENCE OF A. I. DUPONT, WILMINGTON, DEL.
Carrère & Hastings, Architects.

A PALATIAL COUNTRY HOUSE IN DELAWARE

THE A. I. DUPONT RESIDENCE.

CARRÈRE & HASTINGS, ARCHITECTS

PHOTOGRAPHS BY FLOYD BAKER



SINCE the days of the great, stately mansions of the South, the architectural tastes of many Americans of means have shown tendencies toward the formal type of country house architecture. Whether such a type is the logical one for

the country or not must, for obvious reasons, be dismissed as a question of individual taste and requirement. Certainly in the formal type of house the architectural success of the treatment is not dependent upon the qualities of domesticity expressed in the design, but rather upon the merit of qualities of abstract architecture, as such.

Thus, in the A. I. du Pont residence, near Wilmington, designed by Carrère and Hastings, we see much of marked interest, both in its significance as an index to certain tendencies in one sort of American country life, and as a remarkable monument to the fact that, for this type of country dwelling the architectural student need not necessarily confine his observations to France. The architects of the du Pont house have always been known as powerful exponents of French architecture—not of modern French architecture, but rather of that more refined and urbane type which graced certain phases of the 18th century.

This period, as is strongly reflected in the Americanized adaptation of the du Pont house, was one of considerable reserve and restraint. For all that it was at times dangerously near being grandiose



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THE ENTRANCE FRONT, RESIDENCE OF A. I. DUPONT, ESQ., WILMINGTON, DEL.
Carrère & Hastings, Architects.

and pompous. It was always dignified, and has, since its first inception, suggested a setting for magnificent entertainments and *fêtes champêtres*—there is even a theatrical quality about the style, which, after all, held the mirror up to contemporary tendencies and ideals.

It must not be supposed, however, that it is intended to imply that this great house by Carrère & Hastings is of more than French derivation. Upon analysis of certain details there is even evident upon the part of the architects an appreciation, at least, of the Italian Renaissance, though the whole is immistakably American in its feeling.

One of the most pleasing of the exterior details is that of the sun-room, of

which two excellent photographs are given. Here is a nicety of proportion and a well-studied mannerism of ornamental detail successfully resolved into an unusually good composition. The detailing of the front elevation has also been well considered, and the columniation is at once dignified and gracious, and excellently adequate as a support for the entablature.

The studied alignment of the terraces with the house contribute largely to its impression of the summer palace of a French noble—if it is to be considered as an importation, certainly it takes its place with all the well bred ease and assurance of one to the manner born—an architectural aristocrat.



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A. I. DUPONT, ESQ., WILMINGTON, DEL.
CARRÈRE & HASTINGS, ARCHITECTS.



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EXTERIOR OF SUN ROOM, RESIDENCE OF
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DETAIL, RESIDENCE OF A. I. duPONT,
ESQ.,
WILMINGTON, DEL.
CARRÈRE & HASTINGS, ARCHITECTS.



ENTRANCE DETAIL, HOUSES AT JAMAICA,
L. I. ELECTUS D. LITCHFIELD, ARCHITECT.



HOUSES AT JAMAICA, L. I.—ONE GROUP OF FIVE HOUSES.
Electus D. Litchfield, Architect.

A SUBURBAN DEVELOPMENT

A STUDY IN HOUSING

ELECTUS D. LITCHFIELD
ARCHITECT



FROM THE real estate operator's point of view the question has often been asked, "Does good architecture pay? Are there more people who prefer the tawdry, flimsy, over-decorated type of house than appreciate a house designed in that simple good taste which is always satisfying and lasting?" Perhaps there are more people who like the flashy and meretricious in houses, just as they do in clothes and furniture, but we cannot be entirely sure that this is so in any of these things. We cannot

be so sure that, if they were available at the same price, the majority of people would not prefer things designed in good taste to those designed in bad taste. At any rate, it is reasonably certain that in this country, and particularly about New York, there is an increasing number of people who appreciate the value of good taste.

Now in the matter of house building, as in the matter of painting a picture, as far as the materials go it does not cost any more to have the design by a great artist than by one who is no artist at all; indeed, the materials may very well cost less, as the greater artist may, through his superior skill and knowledge, exercise greater economy in their use.



ENTRANCE DETAIL HOUSES AT JAMAICA, L. I.
ELECTUS D. LITCHFIELD, ARCHITECT.

Of course it is a fact that the services of a good architect cost more than those of a cheap draughtsman who will make plans at the rate of two or three dollars a day, or of the so-called "architect and builder," who grinds them out at the rate of twenty-five or fifty dollars a house. But when the real architect is engaged for the work, it costs no more to employ the best than the worst, for he receives as his commission the same small percentage on the cost of the work whether he be one of the recognized leaders or an ambitious beginner.

For this reason there have been few small houses designed by architects of ability, because it is only when there is a large number of such houses to be built that an architect having any considerable practice receives any adequate returns for his labor. Because there have been so few carefully designed small houses built, the real estate operators have felt that there is no demand for well designed houses, and have built miles of the other kind, and made no effort to better them.

It is becoming evident, however, that because a man wants a small house, and a comparatively small investment, it is by no means a proof that he does not want a well designed and well constructed house. Today the purchaser who represents the better type of suburbanite is only too anxious to obtain, at a reasonable price, a house designed in simple, old-fashioned good taste by an able architect—a house with all modern improvements, but shorn of all jim-crackery, cheap stained-glass windows, so-called "Moorish grille work," imitation tile fireplaces and slippery varnished mantel shelves, insecurely glued together. At last there is a demand for a simply designed, honestly constructed house.

The architect has long been ready to produce such a house, but has, unfortunately, been obliged to wait until he was called upon. Supply must ever wait upon demand, though it is distinctly a credit to the architectural profession that the demand should, in this case, have been so instantly and ably met. The architect has so long been deliberately excluded (with short-sighted "policy") from real estate operations, that it is

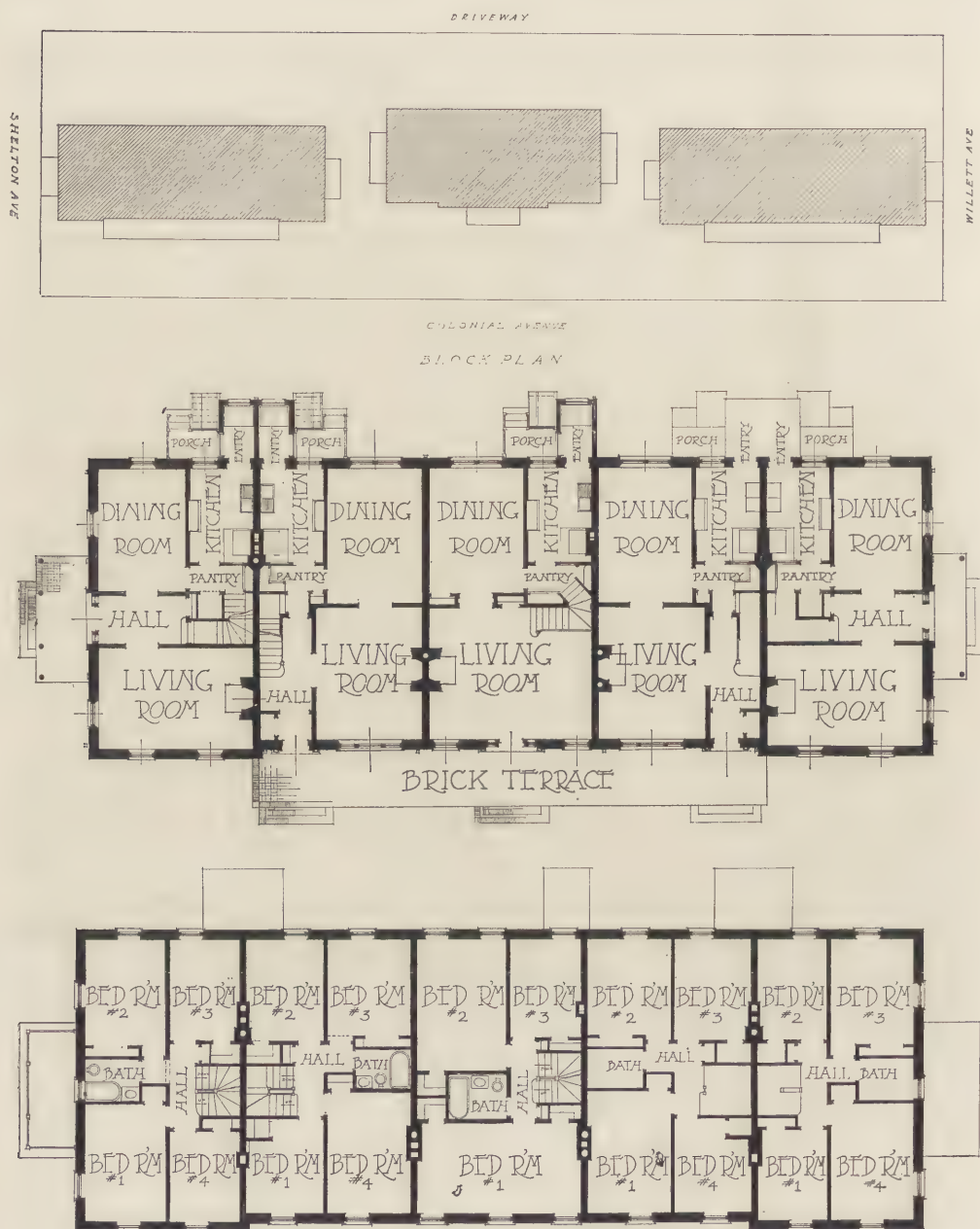


DETAIL OF ENTRANCES—HOUSES AT JAMAICA, L. I.
Electus D. Litchfield, Architect.

commendable that the profession in general, and certain individuals in particular, should throw such interest and good will into the architectural solution, in different ways, of the suburban housing problems, and should harbor no feeling of pique toward a class which, as a whole, has long ignored the very existence of such a profession as "architecture."

The real estate developments in Jamaica, on Long Island, which forms the subject of this article, has been interestingly worked out by Electus D. Litchfield, who has given the architecture of the groups a flavor happily suggestive of the best old work of the same character in and around Philadelphia.

Each house stands on a city lot, 20 feet



BLOCK PLAN AND FIRST AND SECOND FLOOR PLANS—HOUSES AT JAMAICA, L. I.
Electus D. Litchfield, Architect.

wide by 100 feet in depth, and with four of the inside "corner houses" there is sold an additional 10 feet in width, making these plots 30x100 feet. Each house has at the front or side a terrace or

covered porch, and in the rear there is an alley for service, and to afford access to a small garage.

Architecturally Mr. Litchfield is to be congratulated upon the pleasant vein in



DETAIL OF END HOUSE—HOUSES AT JAMAICA, L. I.
Electus D. Litchfield, Architect.

which he has handled the problem. The detail is neither austere nor ornate—it is well studied, well proportioned and thoroughly well mannered. The porches of the houses which terminate each of the two groups of five are happily proportioned, and can well stand the closest scrutiny of their detail in matters of mouldings and minor proportions. The doorways of the three central houses are no less happily detailed, and the fenestration of this long expanse has been unusually successfully handled.

This may be accounted for by the careful design of these three houses—almost a combination of symmetry with unbalance. The central house, with single windows on either side, has a different door from those at right and left, the latter two reversing a duplicate plan.

Taken in their entirety, these houses at Jamaica have combined, in an unusually even admixture a high degree of architectural fitness and nicety, of general dignity and sincerity, of practicality, and of a marked quality of domesticity.



THE GARDEN TERRACE, SHOWING THE DINING
ROOM BAY, HOUSE AT CHESTNUT HILL, PA.
EDMUND B. GILCHRIST, ARCHITECT.



HOUSE AND GARAGE AT CHESTNUT HILL, PA.
Edmund B. Gilchrist, Architect.

AN ANGLO-AMERICAN COUNTRY-HOUSE

BY A PHILADELPHIA ARCHITECT
A RECENT HOUSE DESIGNED BY
EDMUND B. GILCHRIST

BY
H. DONALDSON EBERLEIN



“THERE is no new thing under the sun.” So we are told, at least, and so many of us come to believe, sooner or later, as we grow older and find out for ourselves that some things we had fondly imagined must be exceptions to the rule, must be new, are only hackneyed repetitions of what other people had long ago forgot.

There is, however, such a thing as *novelty* which we might define as the dressing up of old things and ideas under different forms so that they appear new and fresh to our jaded perceptions. It might, perhaps, be better to call this precious gift of rehabilitation *individuality* or *originality*, for originality is far more a matter of individual insight guiding selection, adaptation and arrangement than it is a matter of invention.

Call it what you will, there is no freer stage for the exercise of this quality than the field of architecture. The architect may sometimes feel himself fettered by tradition and precedent—unless he purposely sets about to do freakish things—but, without doing violence to either, he can always impress his individuality upon his work in such a way that the solution of each problem will prove fresh and interesting. Therein lies his title to reputation and esteem. Heaven save us from the contorted vagaries of those that fancy themselves bound to contrive some utterly unheard of thing in order to establish their claim to originality. There are, indeed, such things occasionally to be met with and their aspect is not pleasant or reassuring to behold.

To derive inspiration from beaten paths is an evidence of discriminating perception and the sane and honest adaptation of existing types to the specific needs of each occasion will generally have enough vitality to defeat the charge of

being commonplace. One eminent American architect has naïvely and quite truthfully said that the most original architect is he who knows most about the work of other architects. It is just this way, time and again, that one house furnishes an inspiration for another and yet both have equal distinction and individuality.

The house before us bears an unmistakable family resemblance of this kind to some of the best modern English work that might be described as having strong Norman tendencies interpreted through a British medium, and yet the architect, Mr. Edmund B. Gilchrist of Philadelphia, has very happily used his source of inspiration merely as a suggestive inspiration and not as a guiding pattern. With the aid of the illustrations let us first get a fair mental picture of the fabric and its surroundings, reserving comparisons and criticisms till afterwards.

As the site itself is so vastly moment-

ous in considering any house, we shall begin right there. In that respect this house at St. Martins could not be more favorably placed for exposure, space and view. St. Martins is a part of Chestnut Hill, one of Philadelphia's suburbs that is especially noted for its great beauty, both natural and cultivated. The property on which the house is built lies well up the south slope of a hill and is approached by a driveway that drops rapidly down from a public road running along the northern boundary. To the south the place is skirted by a broad drive and beyond that the land falls abruptly away into the Cresheim Valley, which has now been added to the city's park system and can therefore never be built upon. Thus a delightful unobstructed outlook and plenty of air space are assured in perpetuity. Being on the southern slope, the hill to the back affords protection in winter and in summer there



THE ENTRANCE FRONT, HOUSE AT CHESTNUT HILL, PA.
Edmund B. Gilchrist, Architect.



THE HALL, HOUSE AT CHESTNUT HILL, PA.
EDMUND B. GILCHRIST, ARCHITECT.



ENTRANCE DETAIL, HOUSE AT CHESTNUT HILL, PA.
Edmund B. Gilchrist, Architect.

is usually a cool breeze stirring up the valley from the southwest or from the Wissahickon a little beyond.

So much for the lie of the land, a consideration not to be sneezed at. The approach descending rapidly from higher ground gives us our first view of the house from above. This is an engaging circumstance at the very outset and has a psychological value. Let those that wish to try explain it as they may, the fact remains that going down steps into a room or down a hillside to a house always conveys a livelier sense of comfort and hospitality to the visitor than he would be likely to feel if an ascent were necessary instead. As the extended and most pleasant outlook is towards the south, the terrace and greatest garden extent have been arranged on that side, leaving the north altogether to the entrance court. Very little of the property is bounded by the road on the north. In fact, the only point of contact is by a narrow lane which skirts the lawn of a neighboring house and then dips rapidly down into a forecourt. This lane at one side, and, indeed, the whole western edge of the place, is bordered by a wild hedge

that has fortunately been allowed to remain with its bushes and saplings, its treelets and trees, interlaced and sprawling in delightfully unkept riot. Dogwood and locust, sassafras and wild cherry with a score of other hardy representatives of American coppices form a barrier ever rich in interest and color through all the changing seasons.

From the nature of the site it was necessary to eliminate all suggestion of obtrusive back buildings or service wings. The builders of many of our Colonial Georgian houses found a way of avoiding ostentatious "backs" and having only "fronts," successfully masquing the kitchen arrangements and assuring a decorous dignity and symmetry to the whole structure. Then, for a season, in the darkest days of our architectural abasement, we lost this estimable fashion and yielded to a false and mischievous habit of permitting the service region to be a spot of such disgraceful ugliness, surrounded by a little gehenna of garbage cans and clothes poles, that common decency demanded some sort of forbidding barrier to screen it from public gaze. Of course such a graceless place had to be stuck in the background. After this period of artistic desolation the English architects were the first to rebel against this piece of conventional stupidity and inaptitude and decree that a house should present a comely aspect no matter from what quarter it might be viewed. Our own architects next took up the movement to do away with "backs" and "fronts" and have instead nothing but agreeable and sightly "fronts" all the way round.

The whole exterior arrangement of the St. Martins house well exemplifies the highly commendable practice of the "anti-backdoor" movement. Once down to the level of the site, the driveway broadens out into an ample circle before the north front. To the east the forecourt is bounded by a wall, enclosing a little kit-

chen garth, and the garage. The garth wall ties house and garage together and greatly helps to emphasize the sense of continuity and harmony conveyed by likeness of texture and contour.

The propriety—one might better say the urgent necessity—of making garages, stables or other outbuildings agree with the houses they belong to is obvious enough, but is, nevertheless, so often disregarded that it is refreshing to find a conscientious adherence to the principle of continuity such as the present instance affords.

The kitchen garth is of small extent, with only enough space for a few clothes drying posts, a tiny patch for potherbs and a pathway from the servants' porch to the garage and is of such agreeable aspect that the most severely critical could not find ground to cavil at its arrangement and placing though quite visible from certain points of approach. Southward the garth opens into the flower garden.

Along the south front of the house runs a walled and partly paved terrace from the foot of which a lawn slopes rapidly to a broad road. Beyond this road the ground falls abruptly into the

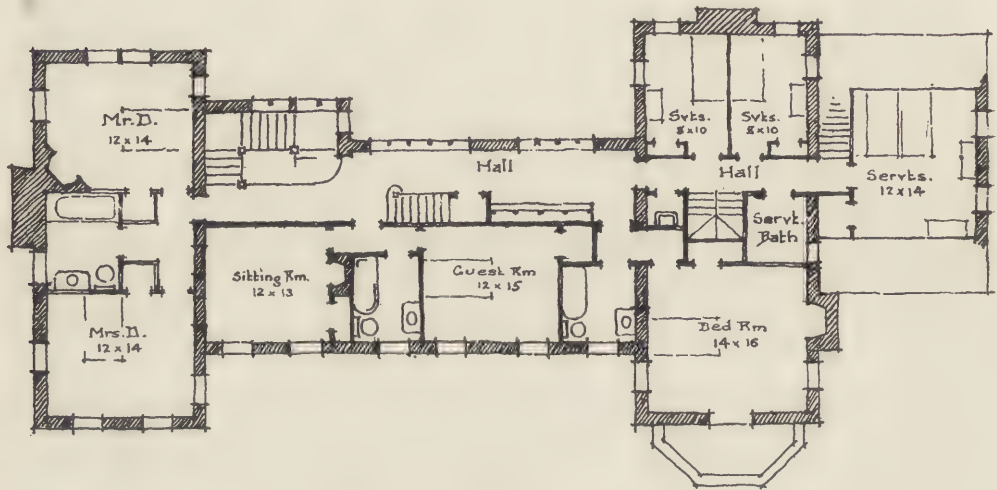
Cresheim Valley. All effort at garden making has wisely been concentrated about this terrace, and the rest of the place given wholly to lawn and trees. The rubble is planted with a great variety of hardy plants that flourish vigorously and bloom in the interstices between the stones. At the ends of the terrace flights of steps ascend from the lawn level, and here *Daphne cneorum* are planted nose high, so that their fragrance seems a greeting upon a closer approach to the house. The walks on the terrace, edged by flower borders, are paved with rectangular random flags pried apart and set a trifle awry with just enough irregularity to avoid the appearance of painfully prim and rectilinear precision that such paving is bound to assume when left to the undirected mercies of conscientious workmen with an inartistic obsession for doing what they conceive to be a "neat, ship-shape job." Just before the three French windows, opening out from the hall, the flagging broadens into a wide paved space.



THE DRIVE AND GARAGE, HOUSE AT CHESTNUT HILL, PA.
Edmund B. Gilchrist, Architect.

Excellently placed for tea or meals in the open. The whole setting and the house have been carefully considered with reference to each other, as, indeed, they needs must be if a successful result is to be achieved. We too often neglect to bestow proper care and thought on this particular and the whole effect suffers in consequence.

laid in horizontal courses, the rough ends unfinished so that the whole slope presents a slightly serrated appearance. This is a small matter, to be sure, but is worth considering for the softening of line it effects. The gables where the coping has not been raised are finished with a neat brick barge. Brick mullions in several of the ranges of windows, notably the



Second Floor Plan

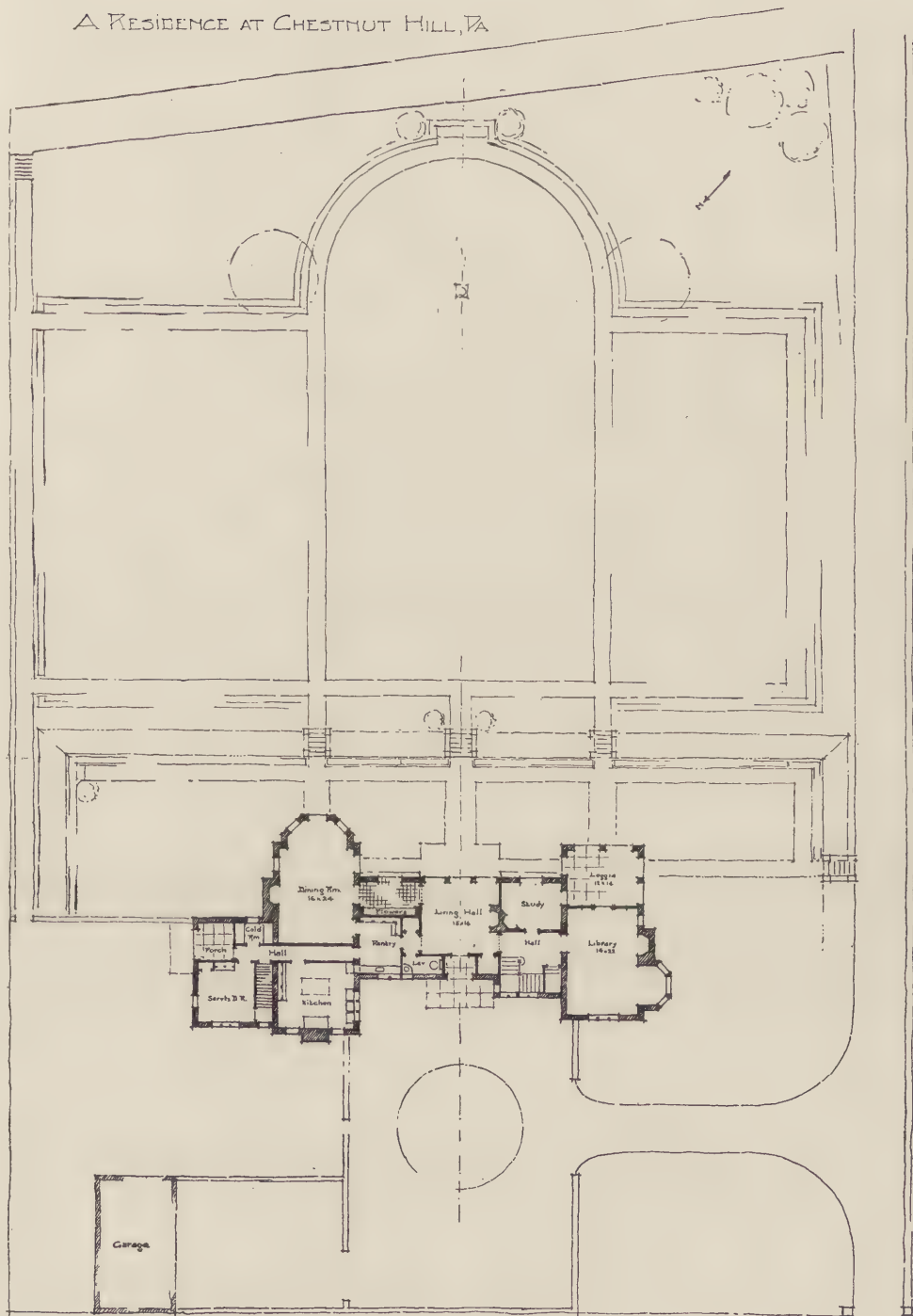
HOUSE AT CHESTNUT HILL, PA.
Edmund B. Gilchrist, Architect.

As regards texture, the walls are highly agreeable. The rubble masonry has been covered with a coat of creamy tan rough-cast, while the chimneys, copings and trims are of brick varying in hue from red to purple according to the firing. The way in which the brickwork has been managed merits special attention. Beginning with the round-arched doorway, which opens on a level with the drive, one cannot fail to be pleasantly impressed with the three receding courses and the quoins which have just enough irregularity to prevent tedious hardness of line.

The same welcome device of quoining has been used to good purpose on the edges of the projecting kitchen chimney and about some of the window trims. The heavy and slightly projecting copings on several of the gables have been carried above the plane of the roof—a favorite Norman trick—and the bricks

window that lights the stairway and the triple window on the ground floor of the western wing, also help greatly to enliven and diversify the external coloring. With this example before us, one cannot help wondering why some such device of brickwork is not more frequently resorted to in order to break the dull grey monotony of a good many concrete houses whose appearance would be vastly more engaging if it were. Another little touch that should not be missed is the base course, two bricks high, with bevelled capping, surrounding the walls of house, garth and garage. Likewise we must note that no two chimneys are the same. These little subtleties produce a fascinating charm in the ensemble and impart distinction to the whole structure. In the present instance the excellent management of the brickwork in combination with the rough-cast ought to

A RESIDENCE AT CHESTNUT HILL, PA.



THE FIRST FLOOR PLAN AND GROUNDS LAY-
OUT, HOUSE AT CHESTNUT HILL, PA.
EDMUND B. GILCHRIST, ARCHITECT.



THE GARDEN FRONT, HOUSE AT CHESTNUT HILL, PA.
Edmund B. Gilchrist, Architect.

go far towards emphasizing the latest possibilities in such juxtaposition and contrast of materials.

The roofs and the capping of the garth walls are of mellow toned cypress shingles. On the north, east and west fronts no dormers appear to disturb the tranquility of the roof and the house therefore has an aspect of repose that a much broken-up roof line is sure to destroy completely. The slope of the roof is gentle and strongly suggestive of the contour of some of the old Norman farm-houses which present such a sharp contrast to the steep pitch of other roofs in whose company they are so often seen. The lines of the house are sufficiently diversified to stimulate interest and yet escape the charge of being fussy.

Another feature to be commended is the disposition of the windows so as to secure broad, unbroken wall spaces. Such an arrangement also contributes to a house's air of repose and the placing of windows in groups in no wise injures the interior lighting and oftentimes makes the furnishing of the rooms an easier

matter than when the openings are more numerous. In the illustrations the good effect of these broad, free wall spaces is considerably marred by the ugly and very unnecessary zebra-like awnings with which the occupants have seen fit to disfigure their abode, a fault for which the architect cannot be held at all accountable. It may be somewhat ungracious to make animadversions upon people's taste in arranging the conveniences of their homes, but it does seem a pity to spoil a really good exterior by affixing great awnings to the north side of a house to keep off the sun where the sun does not shine.

It should be noted that the base of the walls—and this adds to the general good effect—is not pierced by cellar window openings. Such openings as there are—and they are ample for both light and ventilation in the cellar—are sunk in semi-circular wells or areaways and, with the exception of one small window inserted to light a cellar stairway, do not obtrude themselves on the gaze.

The arrangement of the house within



THE ENTRANCE FRONT, HOUSE AT CHESTNUT HILL, PA.
Edmund B. Gilchrist, Architect.



THE GARDEN TERRACE, HOUSE AT CHESTNUT HILL, PA.
Edmund B. Gilchrist, Architect.

is eminently convenient. A glance at the first floor plans shows a spacious living hall from which, at one side, a tiled and sunny passageway, designed especially to accommodate a number of potted plants, connects with the dining room, which occupies the greater portion of the ground floor of the eastern wing. On the other side of the living hall an arched doorway

gives entrance into the stair hall which opens at one point into a study and at another into the library, a delightfully cheerful room that, with the loggia at the south end, takes up the entire extent of the west wing.

Pantry, kitchen, servants' dining room, porch and cold room are all placed so that they are entirely convenient and ac-



THE GARDEN TERRACE, HOUSE AT CHESTNUT HILL, PA.
Edmund B. Gilchrist, Architect.

cessible and yet quite away from the rest of the house, so that one is not at all conscious of the workings of the establishment. In the cellar are heating and storage equipments and a large, light laundry with outside steps into the kitchen garth, so that no clothing has to be carried through the kitchen. Everything has been planned for the comfort and convenience of the servants, so that no excuse remains for grudging or inefficient service.

Above stairs the house meets the expectations formed by an examination of the first floor. Five large bedrooms and three baths are provided for the family on the second floor and in the east wing. Above the kitchen and servants' dining room, and quite separable from the other apartments, are three comfortable bedrooms and a bath for the servants. The

central portion of the house has also several rooms on the third floor.

As may be seen by the illustrations, the wholesome restraint and simplicity that we discern outdoors have been preserved within. The very effective treatment of the woodwork challenges close attention, especially the severe and bold but intrinsically graceful panels and mouldings which betray a strong Queen Anne or early Georgian feeling suggestive of the epoch when that style was in its purest and most vigorous stage.

Criticism of a good thing should be appreciative, and this fair-minded people will frankly admit. As a sop, however, to acid cavillers who must find a dead fly in every pot of ointment in order to be quite happy, one might take exception to the severance of the main portion of the roof from the wings and the conse-

quent chopped appearance and break of continuity in the line—a thing not without precedent and grounds of defence for artistic reasons—and the presence of dormers on the south front, a matter not quite so defensible. Barring these two

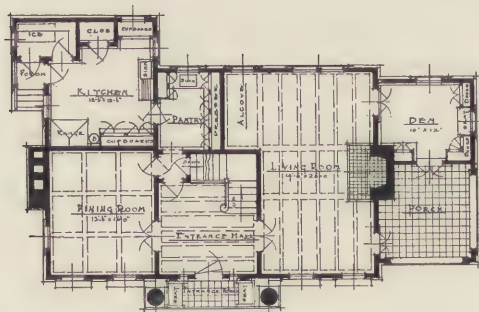
particulars, the proportions are good, the composition excellent and the total result most felicitous—a house thoroughly interesting in itself and at once pleasing from viewpoints superficial and architectural.



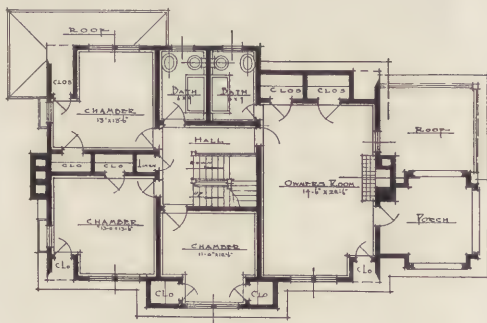
THE KITCHEN GARTH, HOUSE AT CHESTNUT HILL, PA.
Edmund B. Gilchrist, Architect.



DETAIL—RESIDENCE OF A. D. HUNTINGTON, ESQ., SUTTON MANOR, N. Y.
Chester A. Patterson, Architect.



First Floor Plan.



Second Floor Plan.

RESIDENCE OF A. D. HUNTINGTON, ESQ., SUTTON MANOR, N. Y.
Chester A. Patterson, Architect.

PORTFOLIO OF
CURRENT ARCHITECTURE



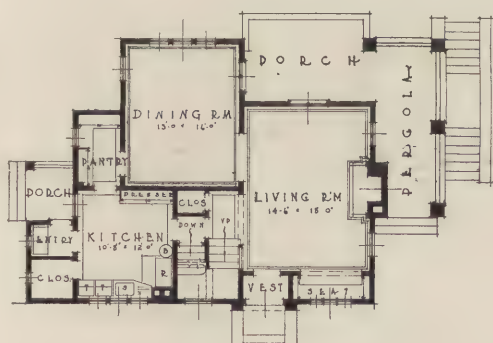
ENTRANCE DETAIL, RESIDENCE OF A. D. HUNTINGTON, ESQ.
SUTTON MANOR, N. Y. CHESTER A. PATTERSON, ARCHITECT.



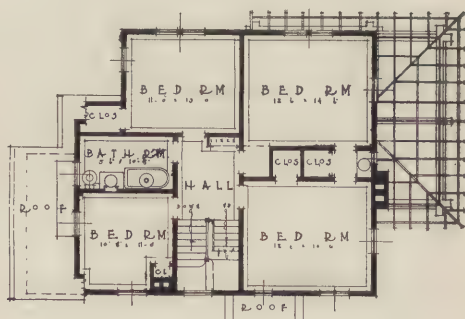
RESIDENCE OF A. D. HUNTINGTON, ESQ., SUTTON MANOR,
N. Y.
CHESTER A. PATTERSON, ARCHITECT.



RESIDENCE OF ALEXANDER P. HIGBIE, ESQ., SCARSDALE, N. Y.
Slee & Bryson, Architects.



First Floor Plan.



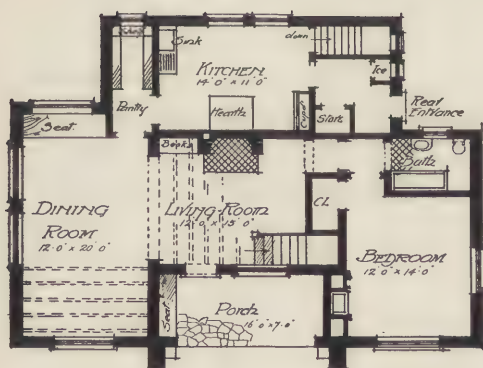
Second Floor Plan.

RESIDENCE OF ALEXANDER P. HIGBIE, ESQ., SCARSDALE, N. Y.
Slee & Bryson, Architects.

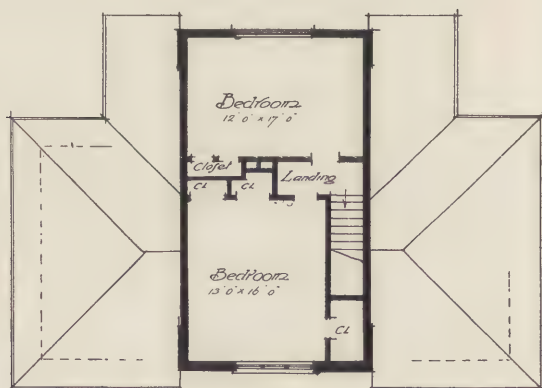
An unusual feature of this plan is the placement of the kitchen at the front of the house. This, however, has been cleverly effected, and for a house of this size there are many conveniences in minor details. It will be noticed that the "living space" on the first floor—the Living Room, Dining Room and Porches occupy about two-thirds of the total floor area.



A BUNGALOW COTTAGE AT WOODMERE, L. I.
A. Redfern Cornwell, Architect.



First Floor Plan.



Second Floor Plan.

A BUNGALOW COTTAGE AT WOODMERE, L. I.
A. Redfern Cornwell, Architect.

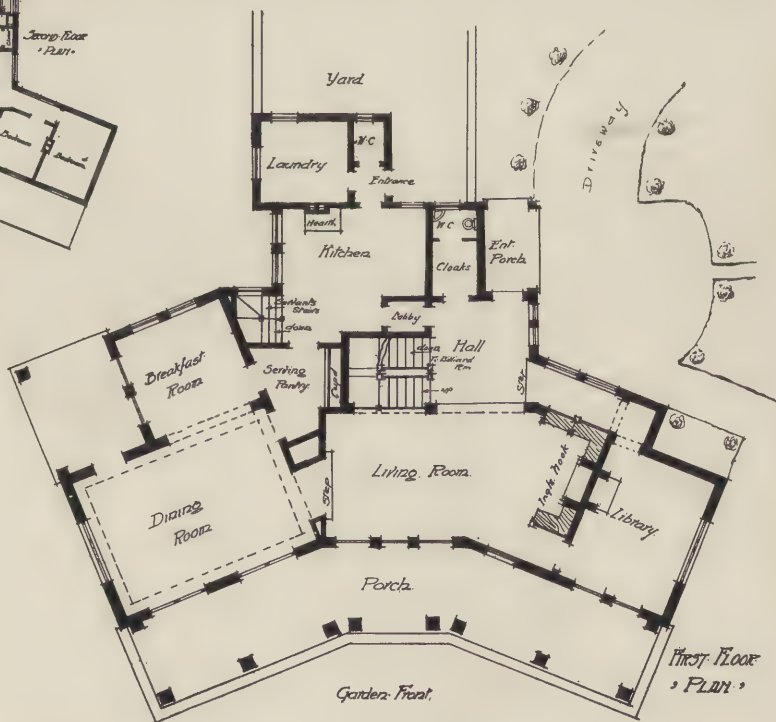
An interesting study by an English designer, in which the "small house" problem has been solved in plans giving a large combined living and dining room, an ample kitchen, and three large bed-rooms. In addition to the practical qualities of the planning, there is a pleasantly picturesque character in the general appearance.



A HOUSE TO BE ERECTED AT HASTINGS-ON-THE-HUDSON.

A. Redfern Cornwell, Architect.

There is an interesting irregularity in this plan, which is distinctly away from the commonplace, and ingeniously worked out.

Second Floor Plan.
(At smaller scale.)

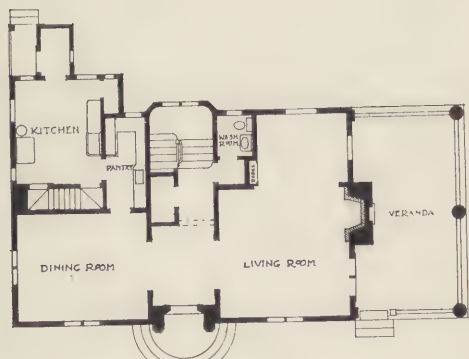
First Floor Plan.

A HOUSE TO BE ERECTED AT HASTINGS-ON-THE-HUDSON.

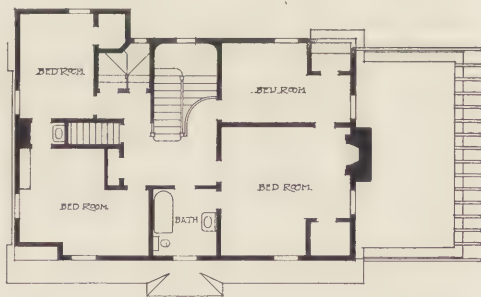
A. Redfern Cornwell, Architect.



RESIDENCE OF JOHN P. ALLEN, ESQ., SCARSDALE, N. Y.
John C. Moore, Architect.



First Floor Plan.



Second Floor Plan.

RESIDENCE OF JOHN P. ALLEN, ESQ., SCARSDALE, N. Y.
John C. Moore, Architect.

Here is a well-planned small house, providing, as it does, not only a pleasing exterior, but the idea of a large living room, and a sense of space on the first floor. The back stair giving privacy to the maid's room over the kitchen is a feature rarely met with in a house of this size.

WHAT DO WE KNOW ABOUT LIGHTING

A STUDY THEORETICAL, SCIENTIFIC & PRACTICAL
By F. LAURENT GODINEZ, CONSULTING LIGHTING SPECIALIST

VI—On Indirect Lighting (Part II)

Note.—In this article the discussion of indirect lighting is resumed. Various interiors are illustrated and significant features described. The necessity for conservation of vision is emphasized and the destruction of harmonious attractive lighting over that of the commonplace shown by comparative photographs. The next article includes combined direct and indirect applications, with special reference to the treatment of light in the home.—Editor.

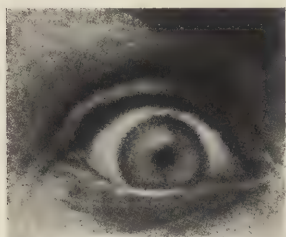
Photographs by August Patzig & Son.



WE have all experienced the painful annoyance of glaring lights. All our public conveyances are so lighted (?) that literally none who ride may read. A pair of smoked glasses should perforce accompany the sale of every New York subway ticket—or wherever vehicles are mislighted by glaring lamps, unshaded, and brutally placed directly before the eyes of unfortunate passengers. Those who have opposed indirect lighting—a few manufacturers whose products are only suited to applications of “direct”—have stated that even lighting, the source of which is concealed, can be annoying to the eye. There is some truth in this, but not in the broad implied sense. I have previously alluded to *cove lighting* with reference to the unattractive “spotty” effect resulting from the placement of bare lamps behind a cornice. The physiologically bad feature of this arrangement is the *directional effect*, i. e. —light rays which strike the ceiling near the wall above the cove, and are diffused, and redirected downward at such an angle that in large interiors so lighted, occupants seated in any part of the room are intensely annoyed by these rays of redirected light, which are not intercepted by the eyebrow, and enter the eye so as to disturb sections of the

retina which have become, through usage, unaccustomed to such directional stimuli. The small room in which illuminating engineers were wont to hold their meetings in a club-house in New York happens to be as bad an example of indirect cove lighting as the writer has ever encountered outside of a lighting company's office in lower New York. To convince oneself of the accuracy of the above statements, when seated in a room lighted indirectly by lamps within a cove, place one hand, visor like, above the eye, and note the immediate sense of relief, due to protecting the annoyed sections of the retina. There is no excuse for ocular annoyance of this sort. Anyone, even an office boy (who in more than one instance has “laid out” lighting outlets on a blue print with yellow crayon) can understand that *concentrating reflectors* (Fig. 22-B Architectural Record, page 377, April) when used for indirect lighting will direct light on a ceiling so that the ceiling in turn will *redirect* it abruptly downwards, so that anywhere in a room so lighted the eyebrow exercises its natural function of eye protection from misdirected light. In accomplishing this it is not necessary to acquire a “spotty” ceiling effect—bright spots above fixtures, and dark spaces between—since even with frequent outlets, the avoidance of close ceiling positions will correct this defect. Distributing reflectors (Architectural Record Fig. 22A, page 377, April), may be used where large interiors, and low

fixture hanging heights preclude the possibility of undesirable side wall reflection, i.e., redirection of light therefrom which, like the example of cove lighting cited, is physiologically bad.



A



B

FIG. 1.—(A) PUPIL OF THE EYE GREATLY CONTRACTED WHEN EXPOSED TO GLARING LIGHT. (B) SAME EYE, SUBJECTED TO SAME LIGHT, THOUGH INDIRECTLY.

The effect upon the eye of glaring lights vs. concealed lights is very plainly marked in Fig. 1. The tremendous contraction of the pupil when exposed to a glaring light is shown by A—caused by an unshaded electric lamp. The second photograph B, represents the same eye, subjected to the same quantity of light, from the same lamp—but *indirectly*—the lamp being concealed from view and the eye relieved of all glare resultant

from an abnormally bright, unshaded source.

On pages 268 and 269 of the September issue of the Architectural Record were shown photographs of direct vs.

indirect veranda lighting, with a small size 40-watt tungsten lamp. These views on separate plates might appear misleading to some not familiar with such comparisons. Fig. 2 illustrates (*on one plate*) two adjacent verandas lighted by the direct and indirect system. Lamps of the same size (40 watt) were used. The

superiority of the indirect system in lighting the steps so as to "speed (not maim) the parting guest, on his way" is quite apparent.

One of the most prevalent sources of annoying lighting is often found in barber shops, where one must lie in torture staring directly up into glaring light set in a concentrating shade directly above the eye. With direct lighting the placement of glare reducing, rough inner sur-



Photo. by August Patzig & Son.

FIG. 2. A REMARKABLE PHOTOGRAPH OF TWO VERANDAS AT NIGHT, TAKEN ON THE SAME NEGATIVE—TO THE LEFT, THE LIGHTING IS INDIRECT; TO THE RIGHT, IT IS DIRECT.



FIG. 3. AN APPLICATION OF INDIRECT LIGHTING IN A BARBER SHOP.

face opal shades between chairs mitigates this somewhat, but does not help the barber in that it fails to eliminate shadows cast by a side light.

Fig. 3 shows the indirect illumination of a barber shop interior. In this very architectural interior an attempt has really been made to express "something different" in the lighting thereof. Absent is the commonplace glassware—the stereotyped "lighting fixture." Against a light blue ceiling five 100-watt lamps in each of six bowls give a pleasing light, moderate, yet so well distributed as to be perfectly revealing. The interior is 24 ft. 9 inches by 37 ft., or 917 square feet. While 3,000 watts are required to give the desired effect—this does not signify that indirect lighting is less economical than direct. On a strict, practical efficiency basis—measure for measure—anything can be done indirectly that can be accomplished directly—with a light ceiling. We have passed

the stage where the greatly overrated questions of "intensity" and "uniformity" of light need occupy our minds. We are not concerned about the engineer's "efficiency of one watt per square foot." We are indifferent as to variations in brightness which the eye cannot see, and if in obtaining lighting which is effective, attractive—an aid to architectural expression—we are genuinely glad that even five or ten watts per square foot, need not deter us from a maintenance viewpoint, in carrying out our ideas, owing to the economy of modern gas and electric illuminants. The treatment of this interior illustrates the possibilities of reconciling lighting equipment with its environment when the architect is sufficiently interested to study his problem.

When the architectural expression of an interior is of a more prosaic nature we must consider the question of "monotony" in the selection and placement of fixtures. Nothing can be conceivably



FIG. 4.

A well-lighted banking interior wherein the placement of the fixtures gives an impression of monotony.

more ugly than the large commercial interior "illuminated" by an endless succession of dangling balls—or a ceiling scarred by tedious rows of ceiling lights placed with studied square-like regularity, the glaring shades serving to attract, and distract the attention of the employee from the working page, which appears larger by pupillary reaction with each stolen glance at the glaring lights above.

Fig. 4, represents a banking interior. While the fixtures, themselves, are different from the commonplace, their manner of *placement* rather suggests monotony. Fig. 5, on the contrary, is the diametrically opposite. Here, in going from one extreme to another, both ends fail to meet, since the entire lack of fixtures, together with the absolute simplicity of this interior creates a destructive ensemble, combining utility and grace. The reflectors and lamps are concealed within the cornice. Such installations are well suited to gas, the accessible location of source facilitating maintenance—upright mantles are best suited to these applications, and with dead white ceilings, amber mantles should invariably be used.

I have repeatedly mentioned the subject of color modification and again urge that the office which is free from the harsh white light effect is the office most agreeable for efficient working conditions. But what of outlets which are not satisfactorily placed? Here, in an obscure corner a desk, or filing cab-



FIG. 5.

A similar interior effectively lit from an entirely concealed source.

inet has been placed which requires light. Expansion, and the constant variation of business life in America, necessitate changes. With direct lighting these changes usually involve an array of unsightly drop cords hanging from unlamped pockets. Every changed position of office furniture necessitates a new drop cord, and the purchase of a new portable desk lamp. The procedure is wasteful, and inefficient, yet characteristic of a public which has been



FIG. 6.

Practical and efficient indirect lighting of file cases.



FIG. 7. INDIRECT LIGHTING IN A SCHOOL ROOM. HERE ARE PROBLEMS INVOLVING THE ELIMINATION OF REFLECTED GLARE FROM DESKS AND BLACKBOARD.

educated (commercially) to see in artificial light a necessary evil.

In designing the lighting of office floors these are, above all, the tenants' requirements to be considered. These are so greatly varied, hence the lighting, if properly designed, must meet every possible variation. Numerous baseboard outlets are essential for fans, and the innumerable electrically operated mechanisms which have done so much to literally cheapen labor, but the ceiling outlets, when equipped, must incorporate an artificial mechanism adequate and efficient to any and every tenants' reasonable wants. In applications of this sort indirect lighting, by virtue of its greater redirecting (ceiling) area possesses a tremendous advantage over all direct lighting systems.

Fig. 6, illustrates filing culverts which had to be placed where no ceiling outlet was located. With direct lighting expensive wiring and installation cost

would result. By placing indirect lighting equipment on an ordinary fixture at the left the very lowest row of labels and correspondence designations in the bottom drawers are clearly and conveniently discernible without the annoying shades cast by direct lights from behind and above.

Fig. 7 illustrates a purely utilitarian application of indirect lighting in a school room—a place where conservation of vision is usually at premium with a blinding arrangement of lamps and shades that are directly within the visual field of students when regarding the blackboards from their desks. These fixtures, as illustrated, are devoid of beauty, and probably were never intended to be beautiful, yet in the lighting of the schoolroom there are so many other, broader, more vital, human considerations than a uniform distribution of light. Lights which attract by their brightness—convey impressions, particu-



FIG. 8. A CORRIDOR WITH INDIRECT LIGHTING IN FIXTURES WHICH CONSTITUTE SPOTS OF DARKNESS, AND SEEM HEAVY.



FIG. 9. THE SAME CORRIDOR WITH INDIRECT LIGHTINGS IN FIXTURES MORE HARMONIOUS WITH THEIR SETTING.

larly to young and susceptible minds. The force of the associated ideas is very great. Its significance with respect to

lighting equipment is that the lights of the school must not suggest the ugly, vulgar shades which are seen in every

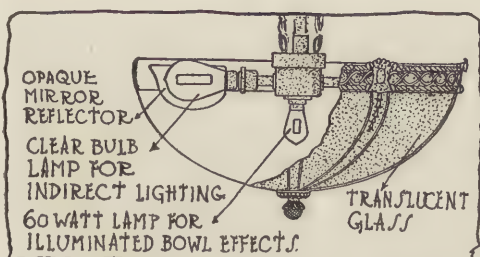


FIG. 10. CORRECT TREATMENT OF INDIRECT LIGHTING EQUIPMENT IN A GLASS OR ALABASTER BOWL.

barroom window. The lighting of the school room must reflect refinement—not vulgarity. Here again, in school-room lighting, the application of the indirect system obviates the necessity for the local illumination of blackboards or desks placed in remote positions.

Fig. 8 shows an application of indirect lighting to a corridor 10x60 feet, with an 18-foot ceiling and three composite bowls, each fixture with an indirect



FIG. 11. A READING ROOM INTERIOR IN WHICH THE SUSPENDING CHAINS IN ONE FIXTURE HAVE BEEN INTENSIFIED IN THE PHOTOGRAPH.



FIG. 12. A DEPARTMENT STORE INTERIOR WITH A SUCCESSFUL EFFECT OF ARCHITECTURAL CONFORMITY SHOWN IN THE DESIGN OF THE LIGHTING.



FIG. 13. A DEPARTMENT STORE INTERIOR SHOWING UNPLEASANT EFFECT OF GLARE FROM COMMONPLACE LIGHTING.



FIG. 14. A RESTAURANT INTERIOR SHOWING WELL DESIGNED COVE-LIGHTING. THIS IS MOST EFFECTIVE IF THE DESIGN OF THE ROOM DOES NOT PRODUCE AN IMPRESSION OF MONOTONY.

lighting interior equipment consisting of three silver plated reflectors and three one hundred watt lamps. Some have objected to the contrast effect of a dark

fixture body against a ceiling lighter in tone, which is greatly exaggerated by the photographic process which fails to reveal supporting chains owing to diffus-



FIG. 15. A RESTAURANT INTERIOR IN WHICH INDIRECT LIGHTING HAS BEEN GIVEN DISTINCTION BY THE USE OF SPECIALLY DESIGNED FIXTURES.

ive action of individual link curvature and constant variation due to vibratory disturbances. With light floors considerable light from the ceiling is redirected upwards again and this serves to relieve the darkness of the dependant fixture body. A lighter fixture finish is shown in Fig. 9—antique ivory bringing out the detail perfectly.

Of course it is not necessary to use opaque fixture bodies with indirect lighting, since visibility of source or an illuminated bowl effect for aesthetic expression, is easily attained by the placement of a small lamp beneath the indirect fixture interior. (Fig. 10.) The effect of such an indirect lighting fixture is shown in Fig. 12, where fewer ceiling outlets give a greater dignity to the ensemble than myriads of lighted shades or balls dangling on chains. Fig. 13. If indirect lighting had nothing to recommend it save its property of relieving the tedium and vulgarity of such installations depicted by Fig. 13 there would

be sufficient justification for its existence without regard for its function as a prime factor in the conservation of vision movement. Properly designed cove lighting is effective, and in many instances quite a relief from fixtures of



FIG. 16. THE SIDE-WALL AS A LOCALE FOR LIGHTING FIXTURE—ENTIRELY UNPLEASING IF PRODUCTIVE OF A SPLITCH OF LIGHT AS IN THIS INSTANCE.

any sort, unless they be used in conjunction with it, simply with regard for their pictorial value. Fig. 14 illustrates indirect lighting of such a type, and perhaps the most notable feature, is the entire absence of the spotty effect which is so characteristic of the placement of bare lamps behind coves or cornices. Fig. 15 shows the indirect lighting of another restaurant where bent glass has been used instead of in bowl format, to give exclusive design to the fixture. The mercantile public are too ready to avoid trouble, by duplicating their neighbors lighting—a trait which must be discouraged if the lighting of this country is to signify anything but a tribute to commercialism run rampant. We have considered the ceiling and cove as a *locale* for lighting equipment, now there remains the side wall and the floor. From an aesthetic viewpoint the side wall light must be subdued. It should contribute to the general ensemble by

virtue of its subordination as a part of the decorative treatment. When the side wall light becomes an annoyance to the eye (Fig. 16) or distorts perspective by splotches of high light—the pictorial value of an interior so mislighted is destroyed. Still another restaurant is shown in Fig. 17. Here marble urns serve to conceal the indirect lighting equipment. Hangings of old rose and tinted ceiling give a rosy glow to the diffused light which, if necessary, aids the beauty of the feminine complexion and adds, in "dollars and cents" terms to the popularity of the dining-room so lighted. The bareness of these urns could be relieved by a floral treatment—a detail evidently overlooked by the decorator—yet the thing is well done, and it is lighting like this, which is a part of decorative and architectural expression which will lift us out of the slough of despond into which we have unthinkingly allowed ourselves to be led.



FIG. 17. A RESTAURANT INTERIOR IN WHICH THE INDIRECT LIGHTING IS CONCEALED IN THE SIX URNS. SUCH AN APPLICATION IS FULL OF SUGGESTION. A POMPEIAN INTERIOR, FOR EXAMPLE, COULD BE EFFECTIVELY LIGHTED FROM TALL VERDE-ANTIQUE TRIPOD BRAZIER.



**Concerning
Cram, Goodhue
& Ferguson.**

Possibly the profession has not to date experienced the passing, from a partnership to individuals, of a firm so important and widely known as Cram, Goodhue & Ferguson, or of one so long in practice. It may be stated that a marked divergence in aesthetic viewpoints between Ralph Adams Cram and Bertram G. Goodhue had existed and was recognized by architects long before any intimation of dissolution reached the public at large. The hand of neither member had been concealed entirely by the firm name in any important work.

In an interview to "The Churchman" Mr. Goodhue is reported as saying: "The separation has occurred because I am convinced that the artistic individual mind works to the best advantage when alone. With Mr. Cram I worked for ten years or more toward what appeared to be the same architectural ideal. But dating possibly from Mr. Cram's visit to England, made at the instigation of 'The Churchman' to write 'The Ruined Abbeys of Great Britain,' there came a divergence of ideas."

Readers of *The Architectural Record* are familiar with most of the work of Cram, Goodhue and Ferguson, and will remember that a special number was devoted to the work of the firm under date of January, 1911. In this was illustrated the remarkable group of "Military Gothic" buildings at West Point, as well as a representative showing of church work. Mr. Ferguson's relation to the two designing members of the firm was noted in that issue of the magazine as follows: "Mr. Ferguson may be said to balance the firm by his successful engineering, administrative, legal and diplomatic ability. The service to a work of art of a censor and critic,

however valuable the practicing artist may find them, are by their nature, insusceptible of celebration."

Mr. Cram is the author of several books and has been a contributor to the leading American magazines. "The Gothic Quest" and "Impressions of Japanese Architecture and the Allied Arts" have become standard books. Mr. Cram's remarkable works as an ecclesiastical architect need not be enumerated here and since he started in practice in 1889 he has also done a considerable amount of secular work. Mr. Cram and Mr. Ferguson will continue to maintain the Boston office and the Houston (Texas) office, and will open an office in New York City.

Mr. Goodhue was, at the beginning of his career, with the firm of Renwick, Aspinwall and Russell. He entered in partnership in 1891 with Cram and Wentworth, the firm later becoming Cram, Goodhue and Ferguson. Mr. Goodhue will continue to practice under his own name, at the office of the former firm in New York, the official dissolution of the firm taking place January 1st, 1914. Mr. Goodhue is at present engaged in the finishing of the Intercession Chapel for Trinity Parish and in carrying out the Baltimore Cathedral, as well as finishing St. Thomas' Church in New York City, upon which both designing members of the firm worked jointly, while Mr. Cram has recently completed the Graduate College of Princeton, which will be dedicated in October. He is retained also in the capacity of Consulting Architect on the work being done at the Cathedral of St. John the Divine, in New York City, comprising the Synod House, the Bishop's House, the Deanry and the chapel of St. Martin of Tours.

That an institution of such standing and attainment as the firm of Cram, Goodhue & Ferguson is to be disbanded may seem to

many a misfortune to the development of church architecture in this country. The future may show, however, that separate personal ideas in architecture, forcefully followed, may result in even greater works than have already distinguished these architects. And certainly it is to be said that *The Architectural Record* is doing no more than voicing the sense of clergy, laity and architects in expressing a sincere appreciation of the past works of Cram, Goodhue and Ferguson, and an equally earnest hope that their success and attainment as individuals will be as great as their success and attainment as one of the foremost firms of American architects.

Errata, July, 1913.

In the July (1913) issue of *The Architectural Record* there occurred an unfortunate and unintentional omission. The issue was devoted to matters of architectural interest in and about Philadelphia, and among other articles appeared a critical study of "Three Types of Georgian Architecture," by H. D. Eberlein. Several illustrations in this article were taken from "Colonial Homes of Philadelphia and Its Neighborhood," a book recently published by J. B. Lippincott & Company. This book was the result of collaboration of Mr. Eberlein and Mr. H. M. Lippincott, and the joint authorship did not, unfortunately, appear in the credits beneath the illustrations in question—an omission as unfortunate as it was unintentional and regretted by the Editor.

Professorship in Civic Design.

Announcement is made of the establishment of the first chair of city planning in an American university. The pioneer is the University of Illinois. Following the English precedent, it is called the chair of Civic Design. The incumbent is to be Charles Mulford Robinson. This action of the trustees follows instruction which was given by Mr. Robinson during three brief visits in the last academic year, to a group of seniors in the division of Landscape Gardening of the College of Agriculture. Mr. Robinson, while taking charge of the course, will be in residence for only brief periods, the arrangement leaving him free to continue his professional city planning work.

Harvard and the University of Michigan have, for some years, given city planning courses in their departments of Landscape Architecture, but the instruction has been wholly by the teachers in those departments. Columbia has had an outside lecturer on city planning. Wisconsin and Cornell have recognized the subject, though making it incidental to other instruction. The University of California is said to be contemplating the institution of such a course. Illinois, however, is the first university to create a distinct professorship in it. The action is largely due to the progressiveness of Ralph Rodney Root, a graduate of the Cornell and Harvard courses, who assumed charge of the Landscape Gardening division at Illinois last Fall. As is little known, the Illinois division of Landscape Gardening is probably the oldest in the United States, it having been offered there forty-five years ago. In the number of students enrolled, it is one of the largest, if not the largest, in the United States.

The National Conservation Exposition.

During the months of September and October Knoxville, Tennessee is the locale of the National Conservation Exposition. This exposition is one of the largest ever held in the South, the grounds embracing lakes and drives laid out in over a hundred acres—a beautiful park among the foothills of the Smoky Mountains. There are eleven large buildings and numerous smaller ones, affording an aggregate area of ten acres of exhibit space.

The purposes of the National Conservation Exposition are more than the promotion of mere development—effort is directed rather toward making the development of permanency, and turning the natural resources of the country into perpetual sources of wealth. It illustrates the warp in which the resources of forests, waters, minerals, wild animal life and human efficiency may be more effectively utilized, how modern machinery lightens labor and increases production, and how many assets that now go to waste may be converted into sources of revenue.

Conservation should be a national issue, and affects the architectural profession in more ways than one, by reason of the constant use of natural materials in finished building products, and in the prophecy of future centralization of all city heating, lighting and power for the conservation of coal.

THE ARCHITECTURAL RECORD



VOL. XXXIV.
No. 5.

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THE PATIO IN THE PAN-AMERICAN BUILDING,
WASHINGTON, D. C. ALBERT KELSEY AND
PAUL P. CRET, ASSOCIATE ARCHITECTS.

THE ARCHITECTURAL RECORD

Vol. XXXIV.
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182



THE PAN AMERICAN UNION AND ITS ANNEX: WASHINGTON, D.C. A STUDY IN PLAN & DETAIL ALBERT KELSEY & PAUL P. CRET ASSOCIATE ARCHITECTS. TEXT BY C. MATLACK PRICE



This is the first architectural magazine article appearing to date thoroughly descriptive of the remarkable buildings for the Pan American Union in Washington, D. C., and the illustrations are of unusual interest as showing the preliminary and completion stages of the building, as well as many details and model studies.

I.

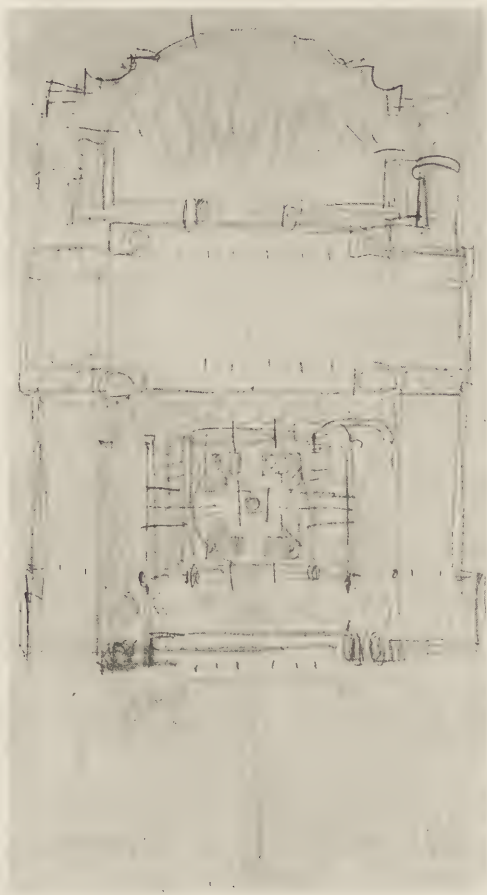


THE PAN AMERICAN UNION, in brief, is an organization and office maintained voluntarily by the twenty-one American republics, controlled by a Governing Board composed of the diplomatic representatives in Washington of the other American nations and the Secretary of State of the United States, administered by a Director General and Assistant Director, chosen by this Board, and assisted by a staff of editors, statisticians, compilers, trade experts, translators, librarians, clerks and stenographers, and devoted to the development and conservation of

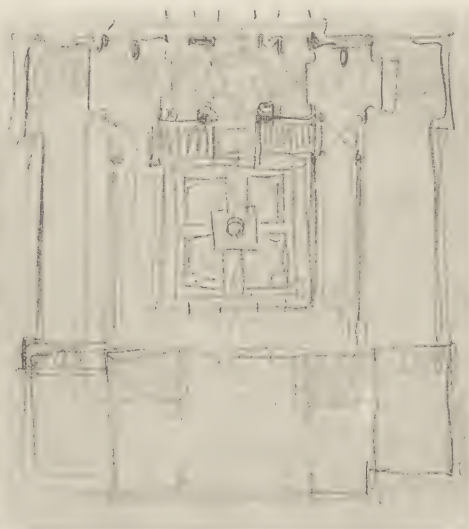
commerce, friendly intercourse, and good understanding among all the American Republics." Such is the official description of the institution and aims of the Pan American Union.

In these pages, however, it is the intention to discuss rather the architectural aspect of the remarkable building which is the home of the institution, than to present a detailed account of its no-less important diplomatic aspects. Before taking up questions purely architectural, however, a presentation of certain facts of a more or less statistical nature will aid in a better understanding of the problem in its broader sense.

The total cost of the new building and grounds closely approximates \$1,000,000. Three-quarters of this sum was given by Andrew Carnegie, who thus showed



A.



B.

TWO FIRST PRELIMINARY STUDIES FOR THE PLAN, BY MR. CRET

These, as well as "C" and "D" opposite, contain the germ of the executed building, and all contained the device carried into the finished competition drawing—the super-imposing of the Hall of the Americas on the Columbus Library. This device won the competition.

his appreciation of the value of the Pan American Union as an instrument working toward the realization of his ideal of universal peace and good-will among all the nations of the world. The remaining quarter of a million dollars was composed of the contribution of the United States and the quotas of the other American republics.

The design of the building is the result of an architectural competition, and from seventy-eight *projets* which the jury of award found worthy of serious consideration, the award was made to that anonymously submitted by Messrs. Albert Kelsey and Paul P. Cret, Asso-

ciated. Mr. Kelsey was the winner of the Travelling Scholarship of Architecture at the University of Pennsylvania in 1896, and Mr. Cret, now Professor of Design at that University, is a native of France, and a graduate of the Ecole des Beaux Arts in Paris in 1903. The jury of award in the Pan American Union Competition was composed of Messrs. Austin W. Lord, Henry Hornbostel and the late Charles F. McKim.

The site chosen for the building, at the corner of 17th Street, N. W., and Potomac Park, is a splendid one for a monumental building, and the Pan American Building has been skillfully kept in

NOTES.

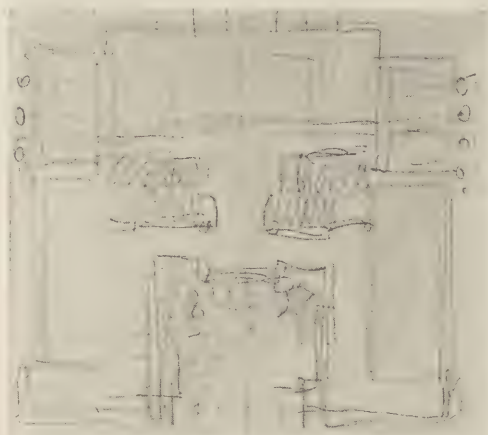
Plan "A" contains all the elements of the building as finally executed: the patio, with grand stairs on either side, and the super-imposed big rooms at the rear, the garden terrace, however, being more elaborate and "explosive" than the final scheme.

Plan "B" shows also the patio, and other component parts similarly disposed, with the exception that the stairs are less efficiently placed, somewhat cutting off the sense of openness.

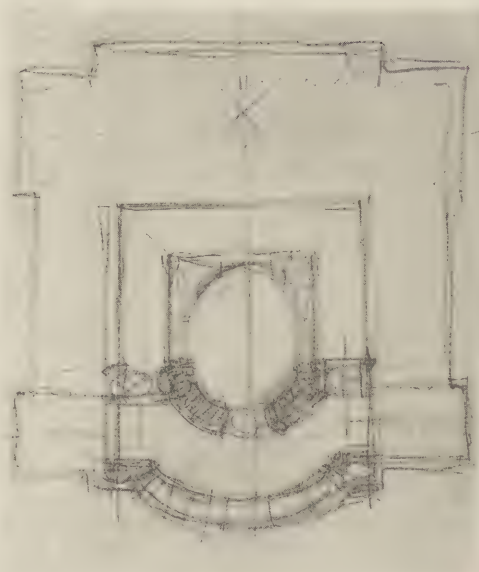
NOTES.

Plan "C" shows an open three-sided court at the front, with circulation forced too far back into the building.

Plan "D" is much more complicated, with two curved stairways, having the same disadvantage as Plan "B."



C.



D.

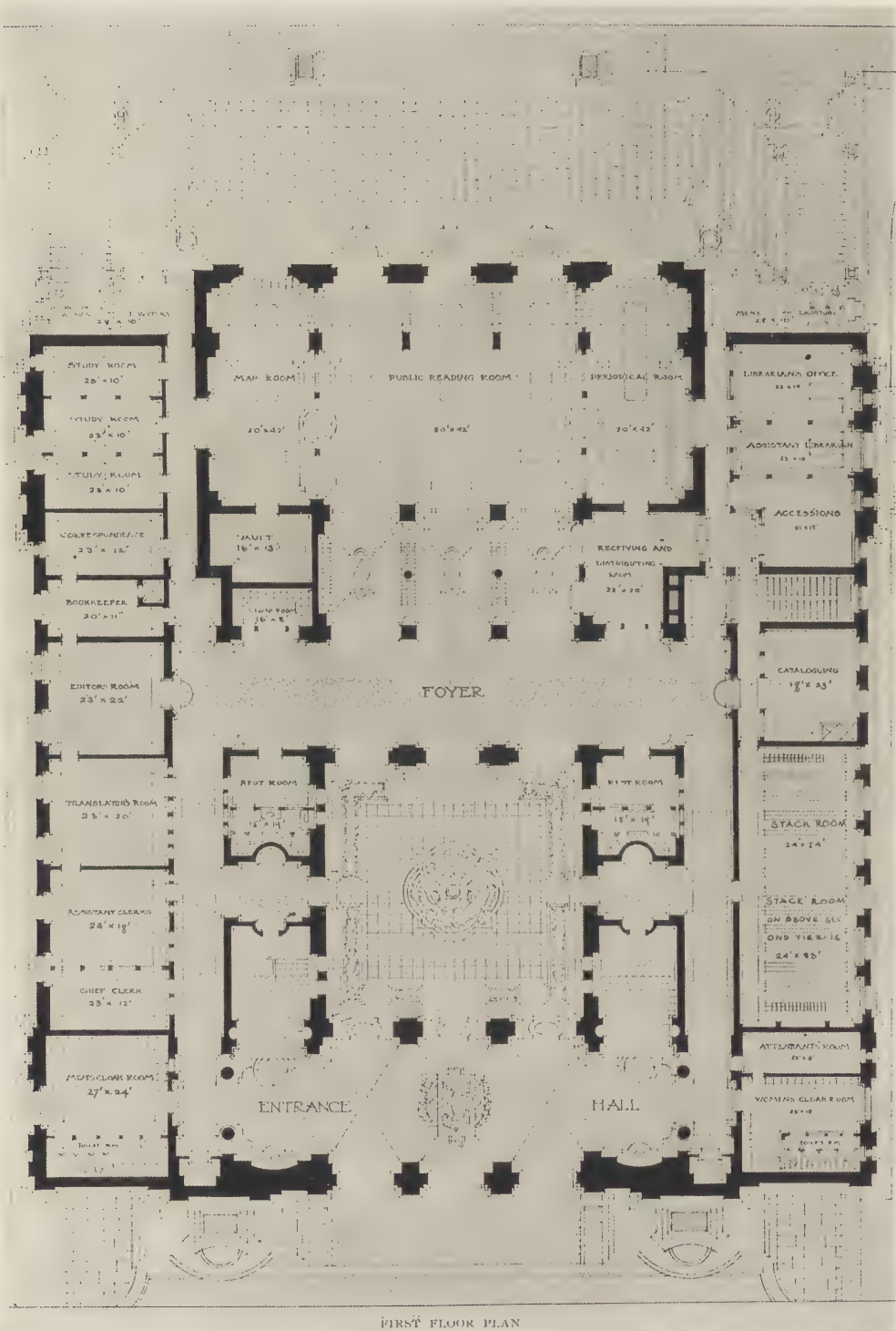
TWO FIRST PRELIMINARY STUDIES FOR THE PLAN, BY MR. CRET.

conformity with the two other important buildings on 17th Street, as well as with the generally monumental character of public buildings in Washington, yet expressive of an unusual degree of individuality in itself. And all three of these buildings, while representing interests and activities of marked public importance, are distinctly apart, officially from the national government. The Corcoran Art Gallery, the headquarters of the Daughters of the American Revolution, and the Pan American Union constitute an interesting group, or rather sequence, of monumental buildings in white marble.

As a general outline of the architectural intentions, preliminary to a more detailed analysis of the manner in which these intentions were carried out in execution, one takes the liberty of quoting at more or less length, the able exposition by Director General Barrett, in his deeply interesting and very carefully prepared volume, "The Pan American Union."

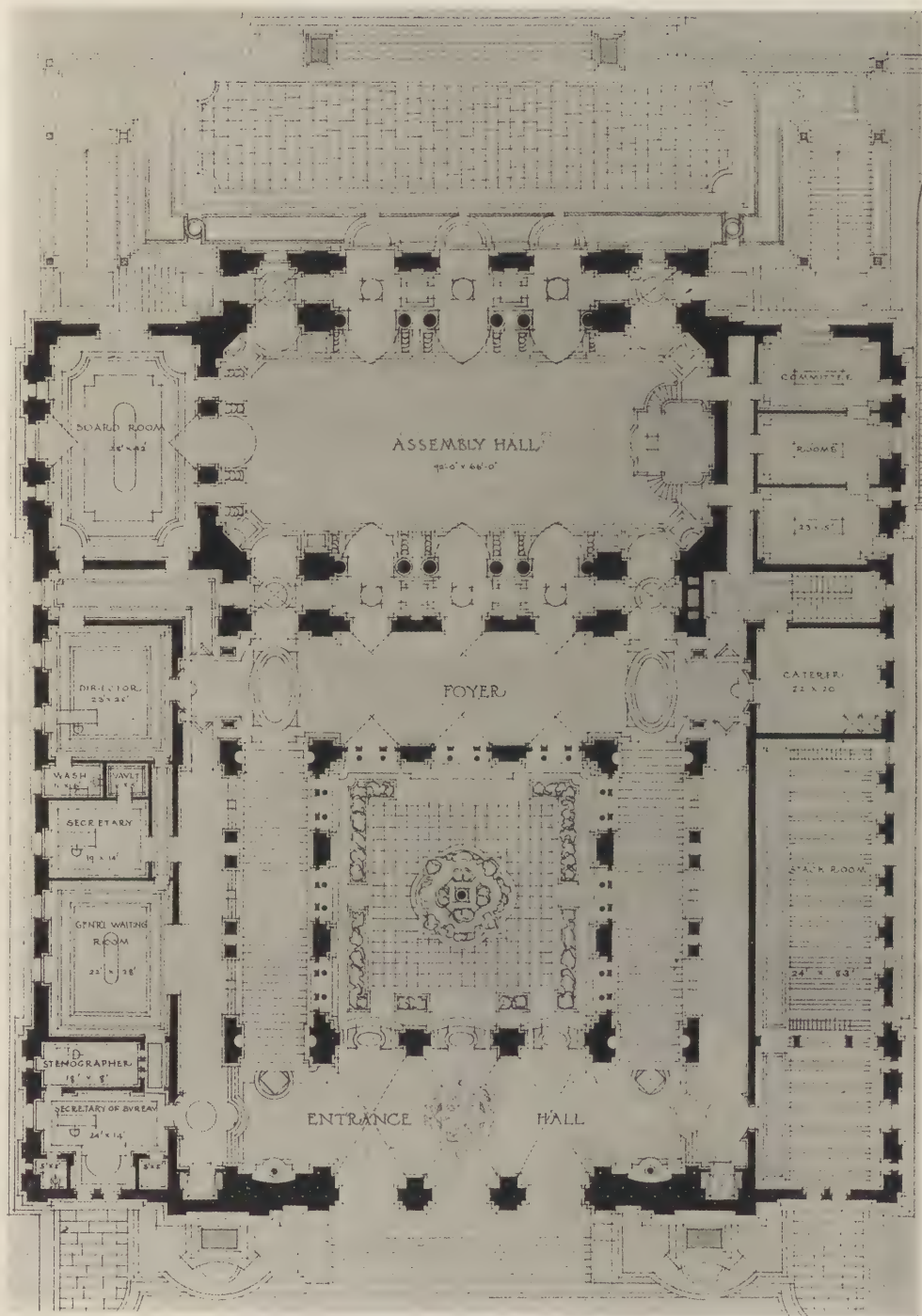
"The way in which the architects attacked the problem of giving expression, both practically and artistically, to the peculiar underlying purpose of the build-

ing is happily set forth in the Bulletin of the Pan American Union for May, 1908. In the first place the work of the Union, as defined by the Rio de Janeiro Conference of 1906, is that of a permanent center of information and of interchange of ideas among the republics of this continent, as well as a building suitable for the library in memory of Columbus. This made it necessary to house under one roof a very active office work and a library which would grow constantly. But there was another important function. This building in Washington was to be the home of the American Republics in the highest sense of the word. . . . It was therefore determined to make the building nearer the type of the residence than the impersonal public building, although as dignified as the subject demands. So it became the expressed hope of the Director General of the Union, and its architects, that when the representatives of the various countries pass the threshold they will have the impression of entering their own house; that when the vestibule, the staircases and the large assembly hall shine with thousands of electric lights as a brilliant gathering throngs the rooms



FIRST FLOOR PLAN

THE FIRST FLOOR PLAN, AS SUBMITTED IN COMPETITION. THE PAN AMERICAN BUILDING, WASHINGTON, D. C.
Albert Kelsey and Paul P. Cret, Associate Architects.



THE SECOND FLOOR PLAN, AS SUBMITTED IN COMPETITION. THE PAN AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

NOTE: One of the remarkable features of this competition is that the plans were executed virtually inch for inch, while the elevations and details underwent radical changes in execution. Note the brilliant superimposing of the Hall of the Americas (designated "Assembly Hall" on the plan) upon the reading room

below. Study the stair treatment as shown here, and in the patio section. Here the stairs were closed in as compared to their final treatment. Their location, however, remained unchanged. Also the disposition of mosaics, etc., remained unchanged, though their execution is entirely different in character.



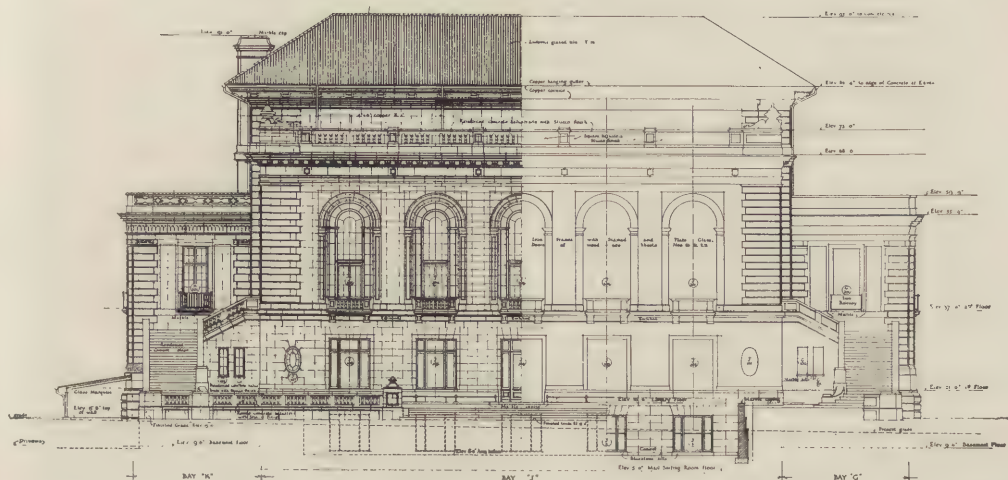
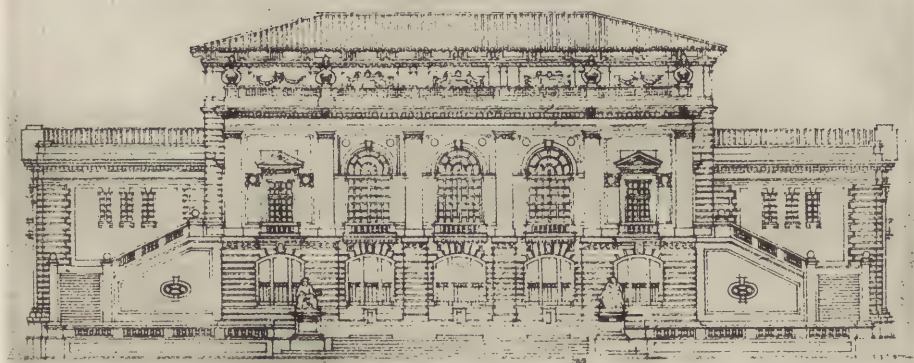
NOTE: This drawing shows a building distinctly *horizontal*, while the working drawing below has a distinct *vertical* effect, the total height, indeed, being raised 16', while the length remained unchanged. Note the "dainty" Italian character of this detail, and the total absence of aboriginal motives, which were later introduced. Here was a project for an attractive building, but not a building of character. Note the elimination in the finished building of the three small

and objectionable windows in the wings, and the introduction of the tall windows and characteristic iron balconies. The heads of "British Lions", on the centres of the pylons were eliminated, as well as the unfortunate vertical line of rustication which the effect of separating the building from its wings. Abolished, too, were all the French school "blocks", and centering motives and other draughtsmen's devices.

FRONT ELEVATION AS SUBMITTED IN COMPETITION. THE PAN AMERICAN BUILDING, WASHINGTON, D. C. ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.



FRONT ELEVATION, THE PAN AMERICAN
BUILDING, WASHINGTON, D. C., ALBERT KELSEY
& PAUL P. CRET, ASSOCIATE ARCHITECTS.

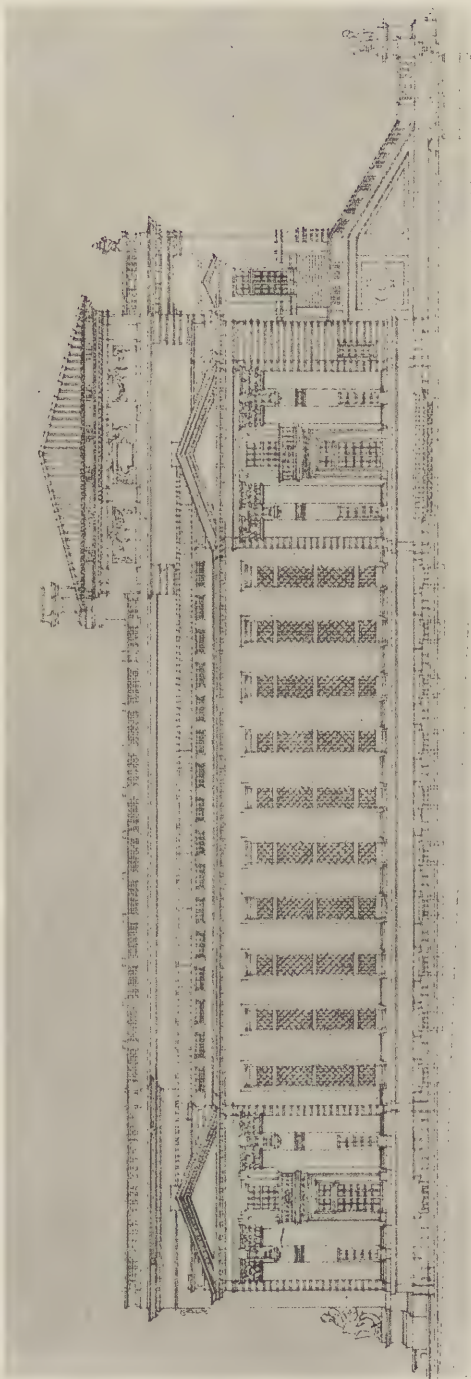


THE REAR ELEVATION, FROM THE COMPETITION DRAWING, THE WORKING DRAWING AND A PHOTOGRAPH OF THE FINISHED BUILDING.

• THE PAN AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

NOTE: In the competition drawing note the apparent length of the wings, and their inadequate lighting. The rustication is very French, and there is an insistence upon indicating the reading-room by suggestions of book-cases. Note the lack of stateliness in the expression of the loftiest and largest room within. Note that the five windows comprise three of one kind and two of another, in contrast with the much simpler treatment in the executed building. Centres were emphasized by the placement of meaningless modern French urns in the competition drawing.

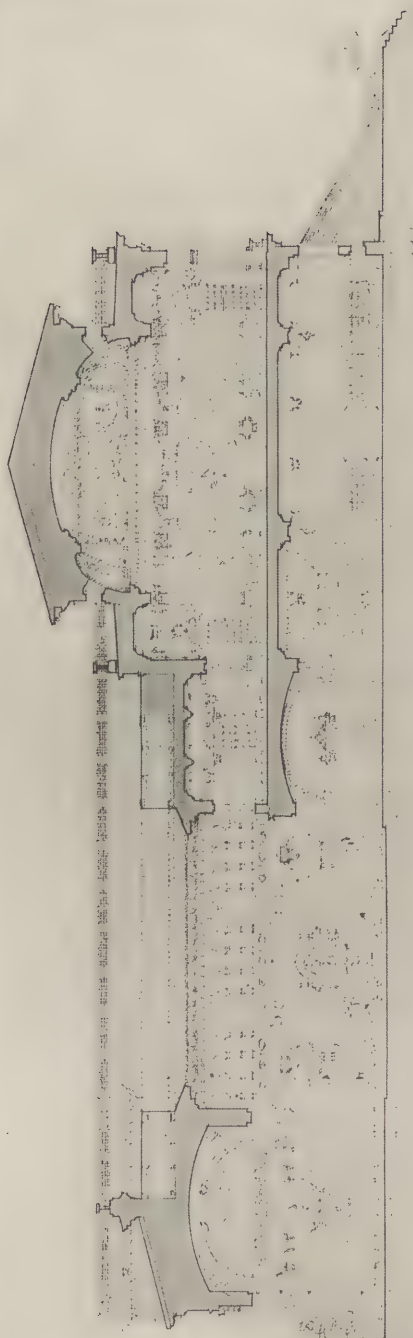


A STUDY IN SIDE ELEVATIONS. THE PAN AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

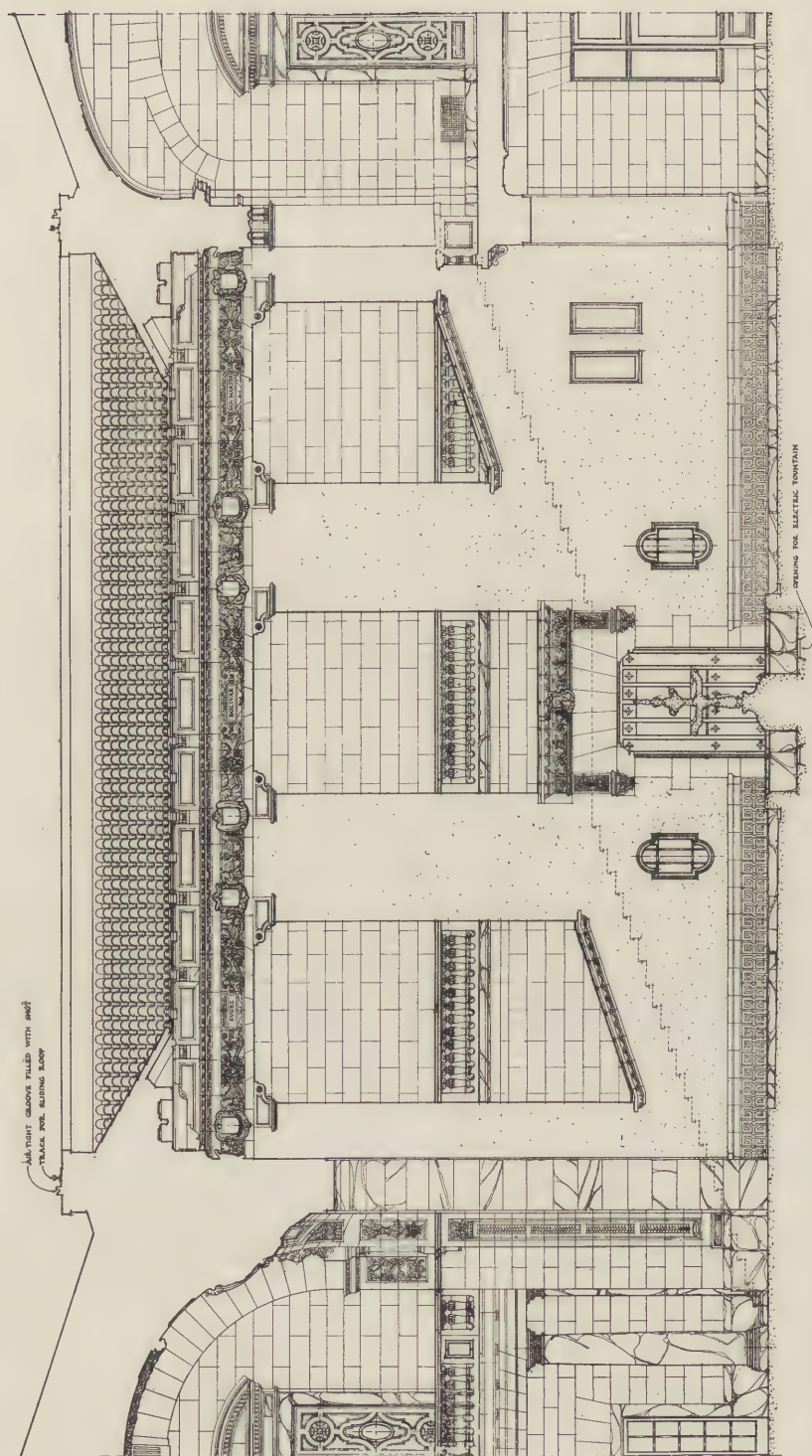
NOTE: Above, in the stack-room elevation, the architects could not resist the impulse, inevitable to all designers, to express the tall book stacks within, though the library is but a subsidiary feature of the interior. The roof of the Hall of the Americas is expressed here in a manner flat and inadequate.

On the page facing are shown the competition drawing and the working drawing of the south side elevation. These give interesting data for comparison. The competition drawing shows a building of nondescript "Roman" character, typical of many competitions—an elevation militant with presumptuous pilasters and pediments which make features of divisions of no importance in the interior. Note in the working drawing the elimination of gable roofs, and of the tile roof the entire depth of the building. The most significant change is in placing the tall windows above and the short windows below. It took some months of study after the competition was awarded before it was realized that the second story was the important story.



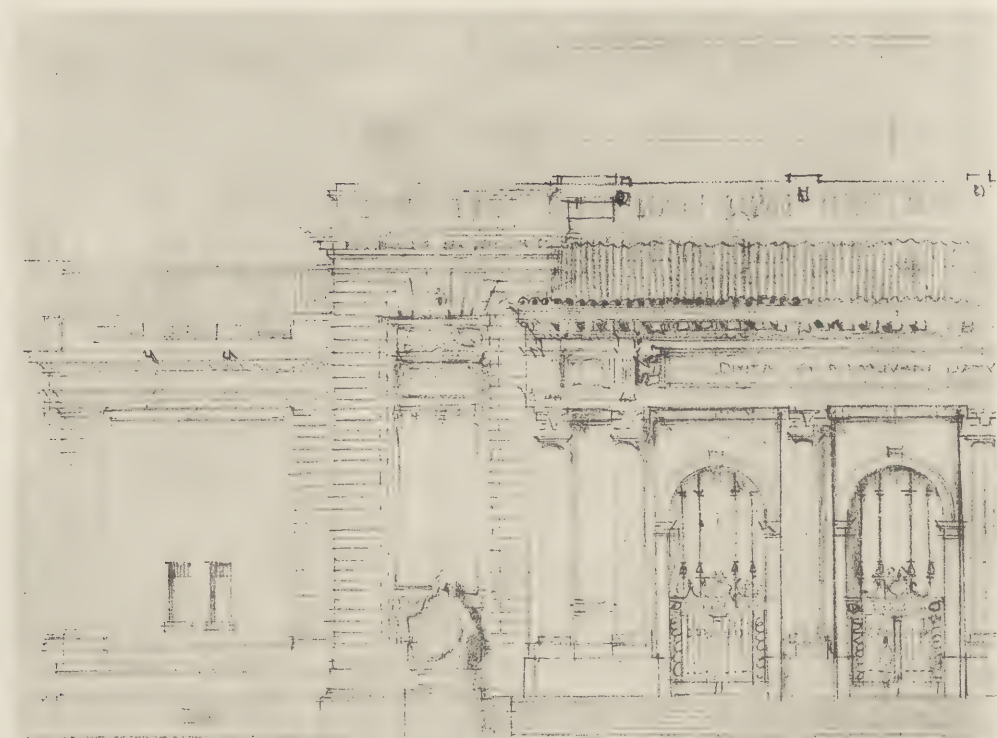
NOTE: It is instructive to compare this section through the entire building with the working-drawing section through the patio, given below. In the competition drawings the first floor was the *belle étage*, or monumental story. Here the front vestibule is low, and the second story actually squat in its proportions. Note that the patio here, though of archaeological character in treatment, is very much closed in, and that its general character is as much Italian as Spanish. In the working drawing below the upper story becomes the lofty story, and the character of the patio is no longer Italian, except for the fountain indicated, but supplanted by the remarkable fountain of aboriginal design, shown in the photographs. The most important change of all was the treatment of the stairs, which nearly doubled the area of the patio. The stairs, in other words, were finally made a part of the patio, instead of being concealed in the building. The ornament is significant, and a reference to the photographs on pages 428 to 438 will show the character obtained in the executed work.

THE COMPETITION DRAWING FOR THE SECTION THROUGH THE BUILDING. THE PAN AMERICAN BUILDING, WASHINGTON, D. C. ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.



A study of the photographs of the patio will show the keynote of the character of the building.

SECTION THROUGH THE PATIO, FROM THE WORKING DRAWING. THE PAN AMERICAN BUILDING, WASHINGTON, D. C. ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.



A PRELIMINARY STUDY SKETCH—PORTION OF FRONT ELEVATION.

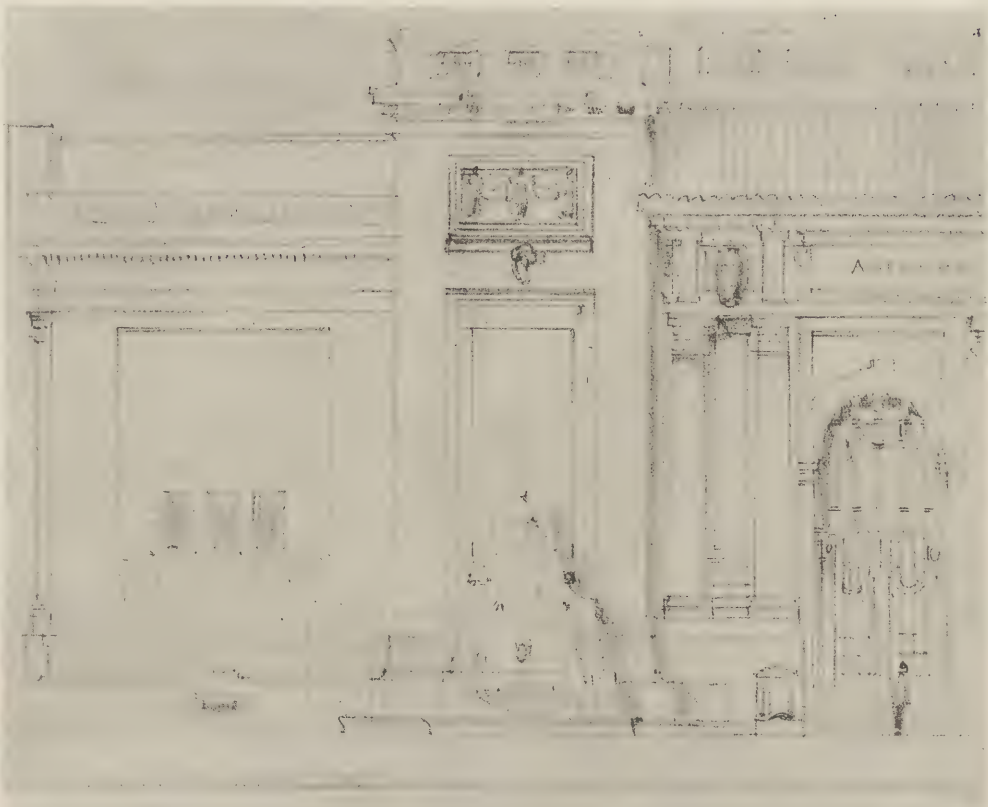
This sketch shows the striving for big, unbroken wall spaces in the wings. It is important to note that the composition of members, etc., in the triple entrance mass, with its side pylons, remained unchanged except in *detail*. The influence of Villa Medici is apparent in the general composition here, as well as in the executed building, but there is a slight over-emphasis of centres and other features by academic mannerisms.

to honor a distinguished visitor, the representatives of the twenty-one Republics may have the impression of receiving guests in their own residences, and not, in a commonplace meeting room.

"To this end the whole building, while of a distinctively monumental character in keeping with its noble environments, has been infused with what might be called a sense of stately domesticity, as in certain palaces that express their character as habitations while they stand for some pre-eminent public purpose. The near neighbor of this building, the White House, is a felicitous instance of this. The same fine feeling has been carried out in combining with a republican simplicity in the design those refinements of form which the Latin race gave to architecture.

"In the decorative finish, the care of

detail, and numerous characteristic touches, the origin of the greater number of the twenty-one countries is typified. After having won the competition and after the disposition of parts had been planned and settled to meet the requirements of the Institution, the architects determined to interpret or express some of the many and varied characteristics of the countries and people represented in the Pan American Union—to reproduce a bit of local color, or that which is most graceful and characteristic of each nation. In other words, the unique opportunity to symbolize architecturally an international movement was embraced with earnestness. In consequence, not only does a consistent theme run through the building, but in a larger sense climatic conditions have been taken into consideration. The



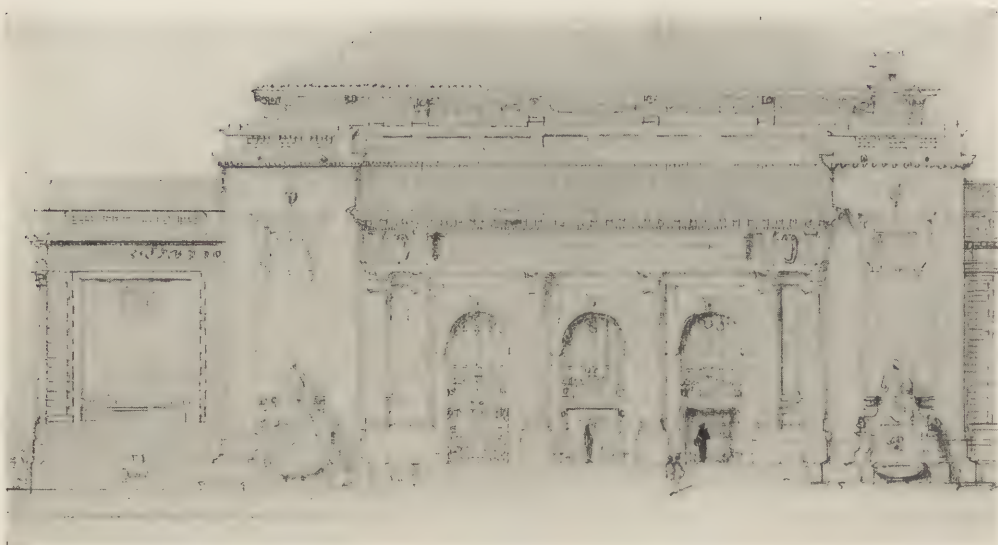
A PRELIMINARY STUDY SKETCH—PORTION OF FRONT ELEVATION.

It is important to note that the scheme for the elevation, as shown here and on the page opposite, includes *columns*. As Washington, however, is a "City of Columns," it was decided that this building would be more distinctive without them. The difference in the treatment of the pylons is noteworthy, and especially in the fact that there was no aboriginal character in any of the detail at this stage of the design.

building, externally is simple and restrained; above all, presenting an appearance well suited to the climate and conditions as they exist in Washington. Internally, by means of an open court or patio, an entirely different but harmonious treatment has been adopted to symbolize the climate and conditions that prevail in the warmer American countries. Throughout the design the two grand divisions of North and South America are held in view. These are represented on the front elevation by the two marble pylons on either side of the triple entrances. Here this motive is given emphasis first by colossal groups, then by two historical subjects in low relief, and finally by the eagle and the condor, the great birds of the North and the South. The next thought was to

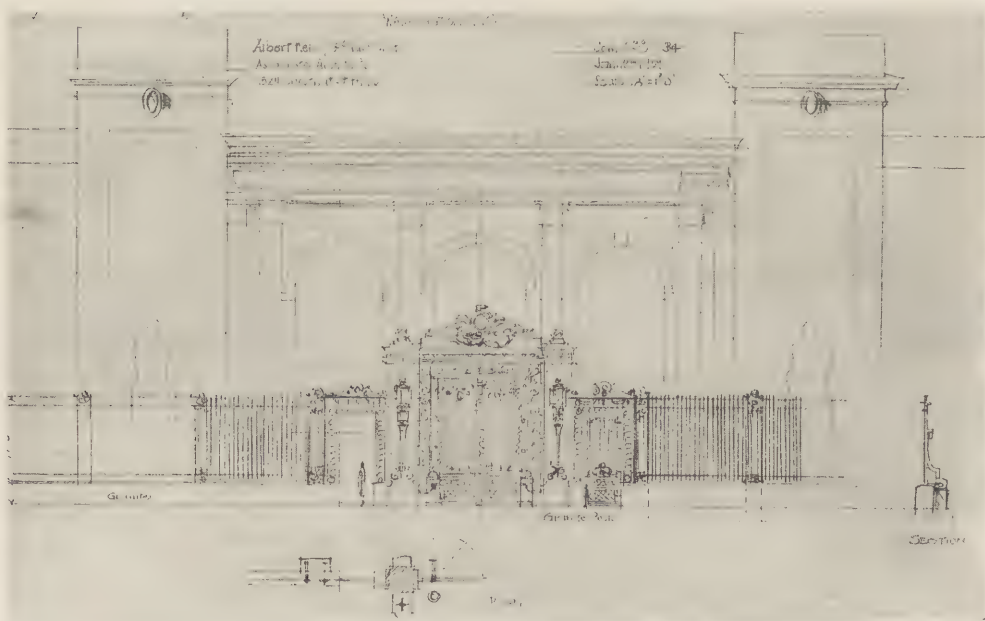
recall the origins of the various peoples making up the Pan American Union. The English influence, the Spanish influence, the Portuguese influence and the French influence are therefore evident in the design. Next, and treated with even greater emphasis, comes the subject of American aboriginal art, together with the local history peculiar to all the twenty-one countries before and since their present geographical lines were established."

Director General Barrett speaks of the intentions held regarding the building now known as the Pan American Annex, and the idea of the gardens, these subsequent realizations of the original idea to be discussed here at length, and he concludes his able *resumé* of the larger ideas underlying the main building:



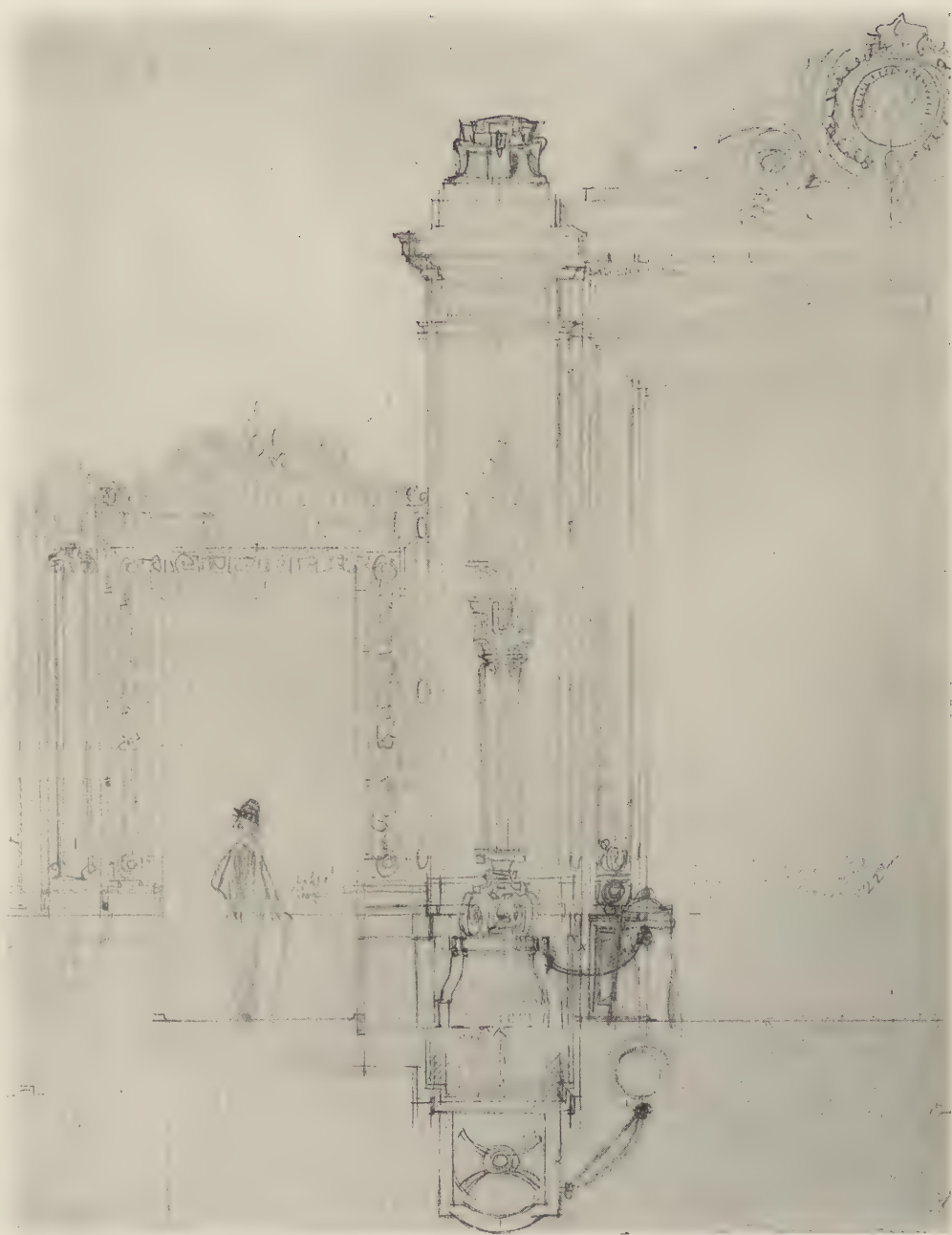
A PRELIMINARY STUDY SKETCH—PORTION OF THE FRONT ELEVATION.

In this sketch there is a marked exaggeration in the treatment of the fountain groups, and an unpleasant separation of the building and its wings results from the unnecessary vertical line of rustication.



AN ABANDONED IDEA—A MONUMENTAL FENCE AND GATE.

Here was a Monarchical idea as opposed to a Democratic idea. It was decided that the entire intent of the Pan American Union was a policy of inclusion and invitation rather than exclusion as expressed by a forbidding monumental fence, no matter how architecturally this might be designed.



AN ABANDONED IDEA—A MONUMENTAL FENCE AND GATE.

From a Pencil Sketch by Paul P. Cret.

This detail plainly shows the origin of the inspiration which led to the design of a monumental fence and gate. Here is even indication of a crown and the familiar French regal accessories surmounting the whole.



LOOKING OUT FROM THE TERRACE—THE PAN AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.



THE CURVE OF THE ENTRANCE DRIVE.

The entire expression achieved in the approaches to the building is one of accessibility, as opposed to the effect which would have resulted from the adoption of the monumental fence shown on pages 400-401.

"But considered by itself, it (the main building) is strikingly organic in character, that is, it expresses externally a plan and a grouping of architectural units carefully designed to serve the purposes for which the edifice was specifically intended. The fundamental idea requires the monumental expression of a dominant theme. Underlying this are certain functions of utility. This monumental intention is to give visible expression to the ideas of unity, of solidarity, of amity that found realization in the Union of American Republics. A great hall of state seemed the most suitable expression of this purpose, thus serving as a gathering place, under impressive conditions, for special occasions, festival or otherwise, all having in some way to



THE APPROACH—THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

As opposed to the shut-in effect which would have resulted from the adoption of a monumental fence, here is an inviting effect of openness in the sweeping curve of the driveway.

do with the union of these republics for mutual ends.

"The two great subsidiary functions are the providing convenient offices for the Pan American Union, together with the housing of the Columbus Library. To these ends we have such a hall of state here realized, superposed upon a subordinate story containing the library and working offices, and flanked on its own level by rooms specifically planned for the Governing Board and other purposes connected with the Institution."

Here, then, is the idea—the scheme of the thing in its more broad architectural aspects.

In "stating the problem," so to speak, Director General Borett, in a chapter on "Architectural Style and Influences," gives the following direct and lucid statement:

"The conditions that determined the

style of architecture were the external circumstances imposed by the generally classic or renaissance character of monumental buildings in Washington. It was important that this edifice should agree therewith. Of equal importance was the other circumstance that in culture, and largely in race, twenty of the twenty-one American Republics are of Latin origin. As such they have always been characterized in their own cities by forms of architecture that reflect that derivation. In the exterior of the building this Latin-American quality is therefore delicately subordinated to the prevalent classic and renaissance conditions of monumental architecture in Washington, although palpably manifest in various subtle indications. Internally it becomes pronounced in certain important respects; moreover it embodies here elements of primitive or aboriginal design,



ENTRANCE STEPS, TERRACE AND ONE OF THE GREAT BRONZE LANTERNS,
THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.
Albert Kelsey and Paul P. Cret, Associate Architects.

such as in a marked degree have often more or less characterized Latin-American architecture in various parts of the New World. Hence, externally, we have the central motive of the edifice expressed in a dominant mass that rises conspicuously above the second story in order to give within the impressive loftiness requisite for a great assembly hall. This hall is approached by important stairways from the main directions. On one side two flights ascend from the entrance facing the street; upon the other side the two additional flights already referred to rise more immediately from the formal garden planned for the rear of the building. From this garden broad low steps ascend to a spacious terrace on the level of the ground floor, and thence the two stairways communicate at either end with an aisle of the hall. The two staircases from the street-front connect

the long vestibule at the entrance with the hall above, enclosing, according to Mr. Sylvester Baxter, the noted art critic, 'what is the most conspicuous, original and charming feature of the design; an open court, or Spanish patio, more than fifty feet square, enclosed by loggias opening from the staircases and adjacent galleries.'

"The patio was a feature particularly called for in the program for the architectural competition. It was regarded as exceptionally desirable, owing to the important part which courts play in Latin-American architecture in general, both monumental and domestic. In this design, however, while it is the element that conspicuously strikes the visitors' attention upon entrance, it is so skilfully developed as to be not so much a central motive as it is something that naturally grows out of the organic character of



PLASTIC STUDIES FOR THE SCULPTURE ON THE "NORTH AMERICA" PYLON.

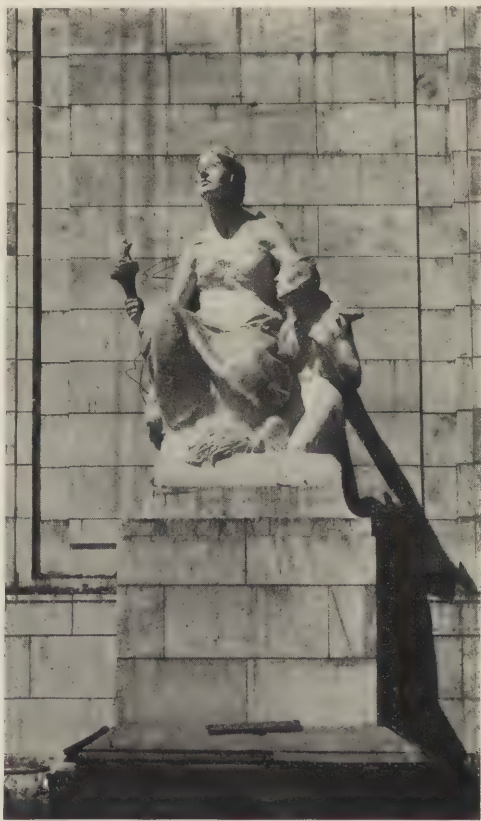
At the cornice, the eagle, symbolic of North America, below, relief panel (see text), at base, group symbolic "North America" group.

the plan in regard to the actual central motive—the great hall above. That is, the scheme of approach to the hall naturally develops this court between the great staircases as a logical incident rather than as a central motive, just as on a seacoast two peninsulas give origin to the bay between them.

"The building is square in plan, with dimensions of about 160 by 160 ft. The character of the design may best be described as that of a rich simplicity, expressing an agreeable combination of Renaissance motives in a blend that may well be termed Mediterranean, suggesting as it does, Italian and Spanish, as well as French derivations.

"The roofs of corrugated tile that cover the portico between the pylon and the great hall beyond contribute materially to this impression. The pylons, with their simple masses, their wall sur-

faces undisturbed by perforations, lend to the facade something of the effect that is conveyed by the two towers of the characteristic ecclesiastical architecture of Latin America. Just as the three entrance arches of the portico between the pylons, with their sloping tile roof, express the vestibule within, so in the organic anatomy of the building the pylons very clearly indicate the terminals of the staircases that enclose the handsome court. Against the main structure, as thus developed, are placed the two elements at either side that contain the working offices, the book-stacks of the library and other adjuncts to the central purpose. It will thus appear that the internal functions of a building could hardly be more clearly expressed than in



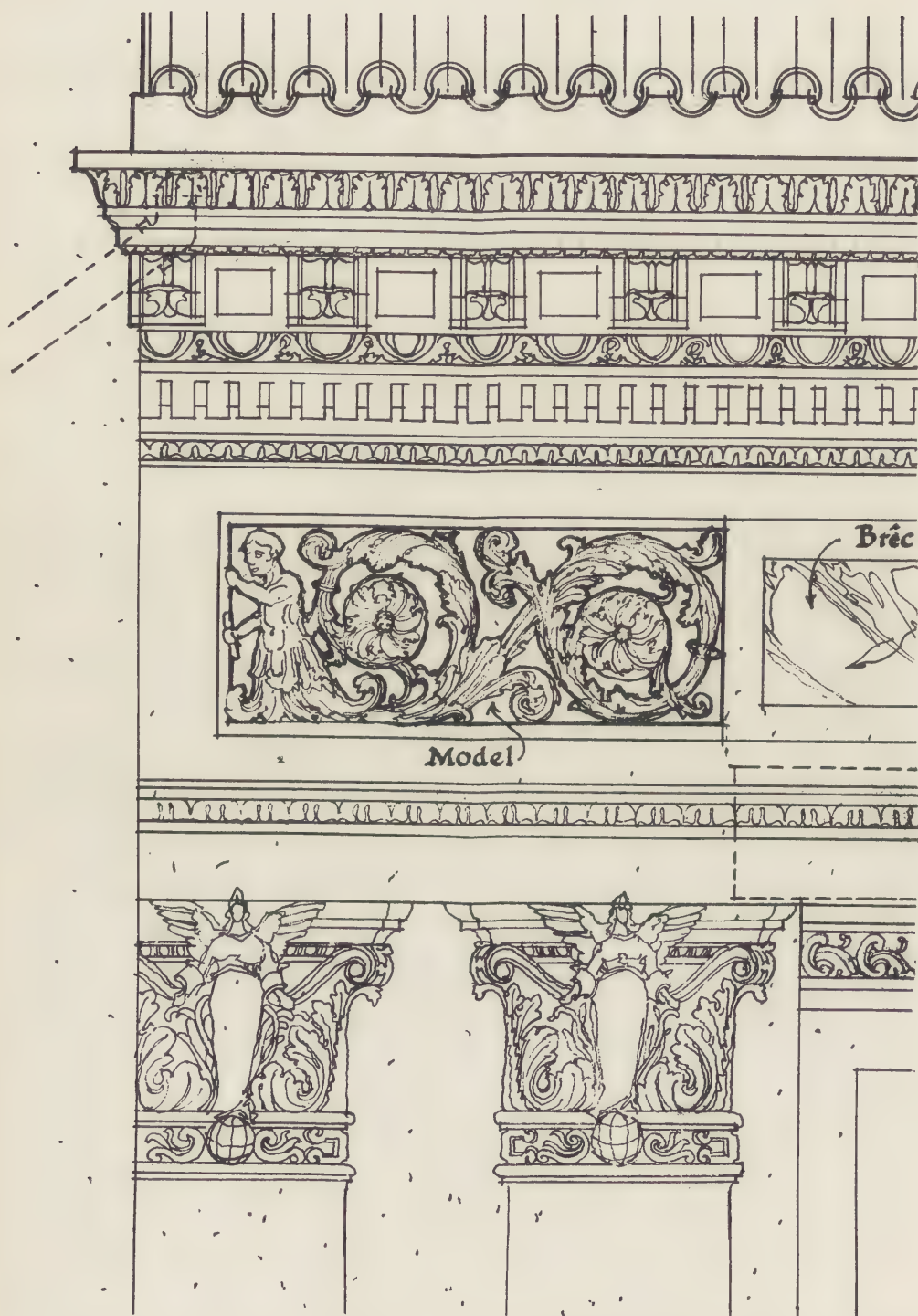
PLASTIC STUDY FOR THE "NORTH AMERICA" GROUP, SET IN PLACE ON THE UNFINISHED BUILDING TO DETERMINE SCALE, ETC.



THE FINISHED "SOUTH AMERICA" GROUP, IN PLACE, LEFT
PYLON, FRONT ELEVATION OF THE PAN-AMERICAN
BUILDING, WASHINGTON, D. C. ISIDORE KONTI, SCULPTOR.
ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.



THE FINISHED "NORTH AMERICA" GROUP IN PLACE, RIGHT PYLON, FRONT ELEVATION OF THE PAN-AMERICAN BUILDING, WASHINGTON, D. C. GUTZON BORGLUM, SCULPTOR. ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.



Scale $\frac{1}{2}''$ = One Foot.

PORTION OF ARCHITECTS' WORKING DRAWING, SHOWING:
SYMBOLIC PILASTER CAPITALS, PANEL, CORNICE, ETC.
THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.
ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.



PHOTOGRAPH FROM A MODEL FOR DECORATIVE DETAIL, ABANDONED FOR MODEL SHOWN BELOW.



MODELS FOR THE DECORATIVE DETAIL IN THE FRIEZE OVER THE TRIPLE ENTRANCE, THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Isidor Konti, Sculptor.
Albert Kelsey and Paul P. Cret, Associate Architects.

NOTE: The first two models (reversed) shown in full, are for the right-hand panel, symbolizing North America, its commerce and activities. The second model was evolved from the first, the difference being that the second more successfully expresses the concentrated *richness* of ornamental character which was desired. The model shown in part only is for the left-hand side, and symbolizes South America, its natural resources and the primitive utensils of the Indian. (The North America panel may be studied, in place, on pages 410, 412.





DETAIL OF THE FRONT ELEVATION, THE PAN-AMERICAN BUILDING,
WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

The pilaster capitals show a symbolic figure of Peace Standing on the Western Hemisphere.

this design that so logically grows out of the plan."

Mr. Barrett gives also a most interesting descriptive discussion of the sculpture in connection with the design of the building—its historic and symbolic significance, in all of which may be read a lasting testimony to the studious care and thought bestowed upon the work by the architects.

"The exterior is entirely of white Georgia marble, with bluish veins. The three doorways of the main entrance are approached by a short flight of white marble steps. On either side, against the pylons, are two sculptured groups depicting, respectively, North America and South America. The bases of the pedestals serve as fountains. Gutzon Borglum is the sculptor of the group that symbol-

izes 'North America.' The group that symbolizes 'South America' is the work of Isidore Konti. The two groups are similar in motive. In each a draped female figure represents the genius of its division of the Western Hemisphere; each cherishes with maternal affection a nude boy approaching adolescence. These boys typify the youthful character of their respective portions of the World. In the North American group the boy, strikingly alert in feature and action, expresses the more energetic spirit of the fully awakened North. The figure of 'South America,' while young and strong, has a softer and more sensuous quality, expressive of tropical ease and luxuriance.

"By the same two sculptors are the low-relief groups in the panels above, on a line with the cornice of the vestibule. These groups appropriately express two of the most significant episodes in the histories of North and South America. Each stands for an heroic act of great abnegation and sacrifice to a lofty sense of duty. One (for North America) depicts Washington bidding farewell to his generals at the close of the American Revolution, at a moment when he was urged to remain the permanent head of the nation, clothed with kingly authority. The other depicts the equally decisive moment when San Martin, a great soldier and statesman of the South American struggle for independence, having crossed the Andes in a march that historians regard as a military achievement surpassing the crossing of the Alps by Hannibal and by Napoleon, and having liberated Chile and Peru from the Spanish yoke, met Bolivar, the heroic figure of the struggle in northern South America, at Guayaquil, in 1882, and relinquished his leadership.

"The character of the two pylons is further emphasized by the two symbolical birds beneath the cornice above—the eagle for North America; the condor, with distinctive ruffle, for South America. Both of these birds are the work of Solon Borglum, and are capital examples of his work as a sculptor of animal life.

"The panel in the frieze of the cornice,



DETAIL OF A PORTION OF THE FRONT ELEVATION. THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

For study of the models for the decorative panel, see page 408.



DETAIL OF THE ENTRANCE, PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

above the portico arches, bearing the inscription International Union of the American Republics,* in a reddish gray marble, is flanked by two richly wrought decorative designs in relief. The one on the north contains the figure of an infant of the Caucasian race, and that on the south one of the American Indian type, each sitting amidst a profusion of fruits and other accessories respectively syn-
 bolical of the North and the South. These are both the work of Konti, who also modelled the charming pilaster caps—a figure among acanthus leaves—representing Peace, bearing in either hand an olive branch and standing upon a

globe where shows the Western Hemisphere.

"The ornamentation throughout the building, it should be said, very frequently repeats in its motives the ideas of peace, the letter 'A' standing for America. Another noteworthy piece of symbolism is to be seen in the stars that alternate with rosettes in the cornice of the pylons. The star is a symbol for nine American Republics, and here a touch of indigenous character is imparted by enclosing the stars in circles bearing a suggestion of Aztec design.

"The ornamentation everywhere contains motives derived from the aboriginal art of pre-Columbian America as well as from Spanish Colonial architecture. Aztec and Mayan designs, for instance, are employed in belts of ornament on the façade and on the garden

*[Since Mr. Barrett's text was written, the name of the institution was changed to "The Pan-American Union," and when this change was made the architects took the opportunity to make the marble panel bearing it narrower, and more in scale with the other divisions of this entablature.—Ed.]



A DETAIL OF THE ENTRANCE, THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.
ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.

NOTE: The inscription in the frieze, "INTERNATIONAL UNION OF AMERICAN REPUBLICS" has since been changed to "THE PAN-AMERICAN UNION." The Washington Monument is seen reflected in the glass of the central arch.

front. The parapet of the sections that flank the pylons has a decoration borrowed from the celebrated fountain of the Salto del Oguá, in the City of Mexico. This fountain originally terminated the historic Chapultepec aque-

duct, now destroyed. The design of the balustrade above the cornice of the pylons, and running along the walls that enclose the court and staircase, is taken from the Cathedral of Chihuahua. The balconies of the long casement windows



Much interesting study was put into the detail of this grille. The heads around the lanterns are taken from the Aztec Calendar Stone, in the Museum of the City of Mexico. In the side panels, the eagle and the condor, shown front and rear, regard each other through the letter "A." The general structural framework of the grilles, was based directly on those of the Cathedral of Saragosa, in Spain.

DETAIL OF BRONZE ENTRANCE GRILLES, WITH A GLIMPSE OF THE PATIO ACROSS THE ENTRANCE LOBBY. THE PAN-AMERICAN BUILDING, WASHINGTON, D. C. ALBERT KELSEY AND PAUL P. CRET. ASSOCIATE ARCHITECTS.



It is most interesting to compare the impressive and monumental loftiness and dignity of this entrance with the original proportions shown in the competition section on page 396. A remarkable effect is to be had from looking out through these arches to a snow-clad vista, and into the Patio at one of tropical verdure.

THE ENTRANCE LOBBY, LOOKING OUT,
THE PAN-AMERICAN BUILDING, WASH-
INGTON, D. C. ALBERT KELSEY AND
PAUL P. CRET, ASSOCIATE ARCHITECTS.



DETAIL OF 'CARTOUCHE IN THE CORNERS OF THE "HALL OF THE AMERICAS," THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul Cret, Associate Architects.

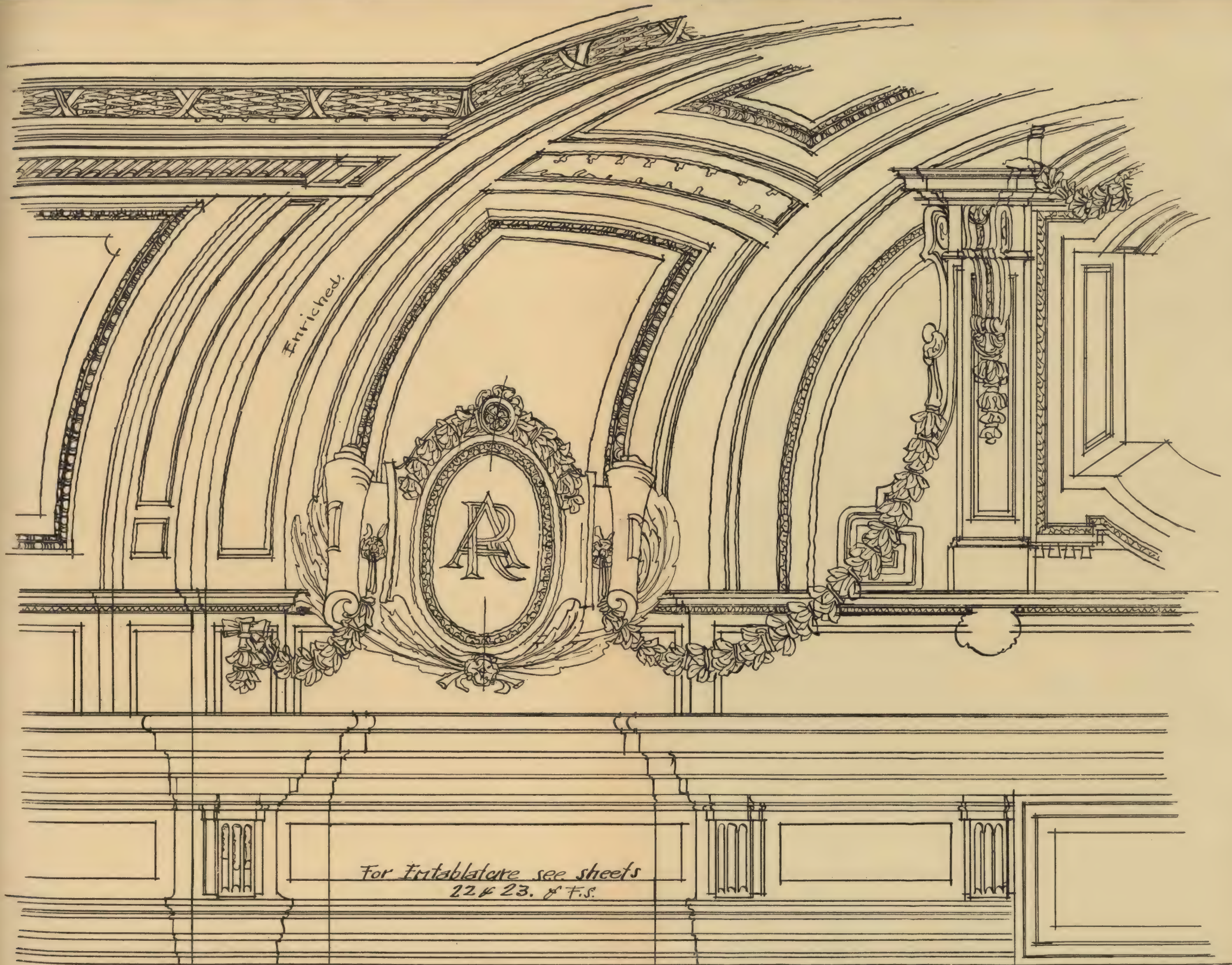
In the executed work the word "PAX" ("Peace") was substituted for the "A. R." monogram, ("American Republics") which appears in the accompanying working drawings.

in the second story are of plain wrought iron work, such as may be seen nearly everywhere throughout Latin America and in Spain.

"In most Latin-American countries the course of such a building would be absolutely open to the air, but the climate of Washington does not admit this at all seasons. Nevertheless, the outdoor character is maintained here while at the same time the requirements of climate are practically provided for. On approaching the building one looks in through the entrances as into a charm-

ing garden, free to the open air. This impression of perpetual openness is given by closing in the entrances with plate glass set in handsomely wrought framework of bronze. In the vernal months the effect is natural; in the inclement season the contrasts has the charm of a climatic marvel.

"The Latin-American character of the interior finds an architectural prelude in the richly beautiful bronze grilles of the three gates. In their decorative motives these gates recall work of a similar character in the choirs of the great ca-



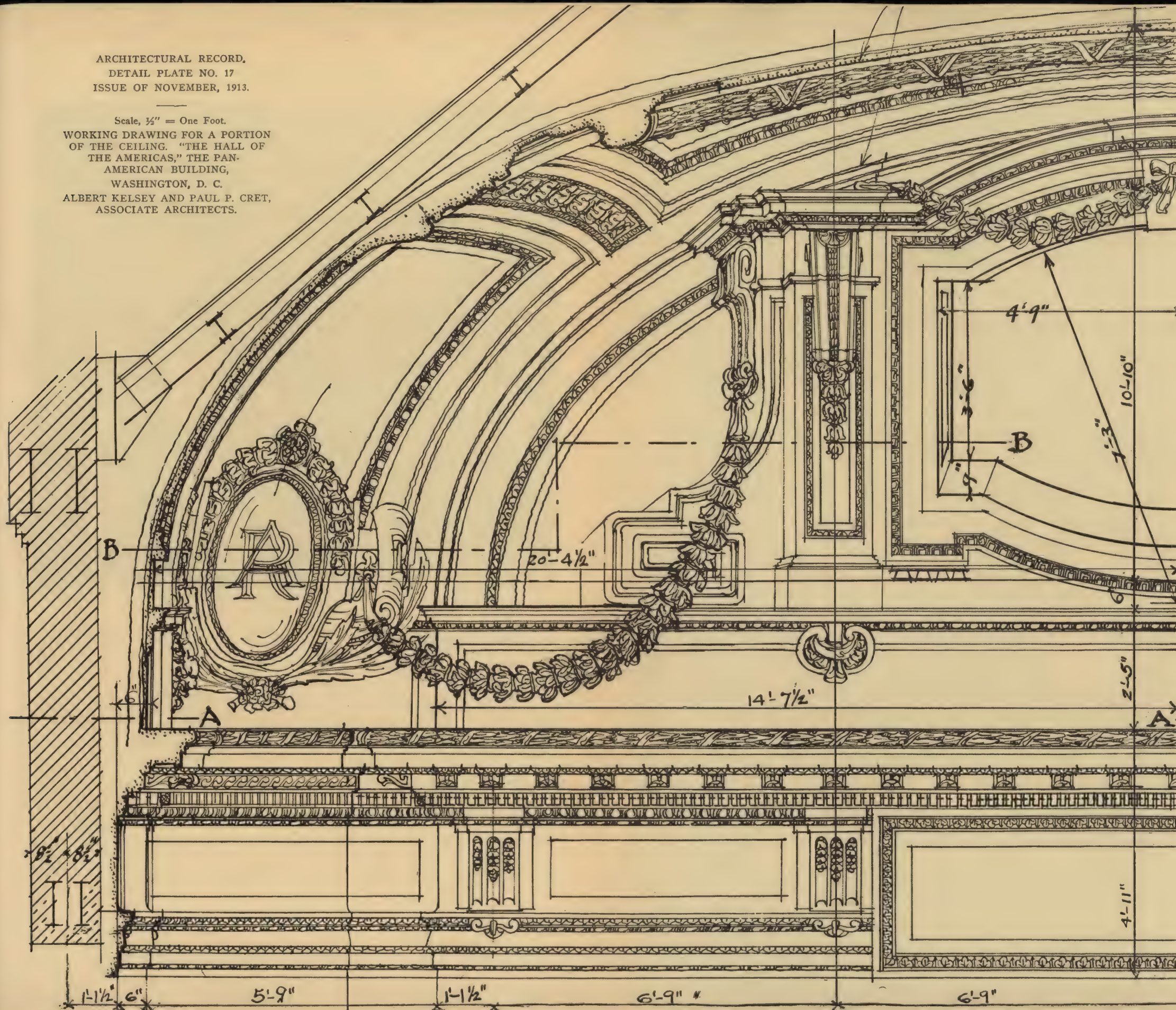
Back of
Foldout
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ARCHITECTURAL RECORD,
DETAIL PLATE NO. 17
ISSUE OF NOVEMBER, 1913.

Scale, $\frac{1}{2}$ " = One Foot.

WORKING DRAWING FOR A PORTION
OF THE CEILING. "THE HALL OF
THE AMERICAS," THE PAN-
AMERICAN BUILDING,
WASHINGTON, D. C.

ALBERT KELSEY AND PAUL P. CRET,
ASSOCIATE ARCHITECTS.



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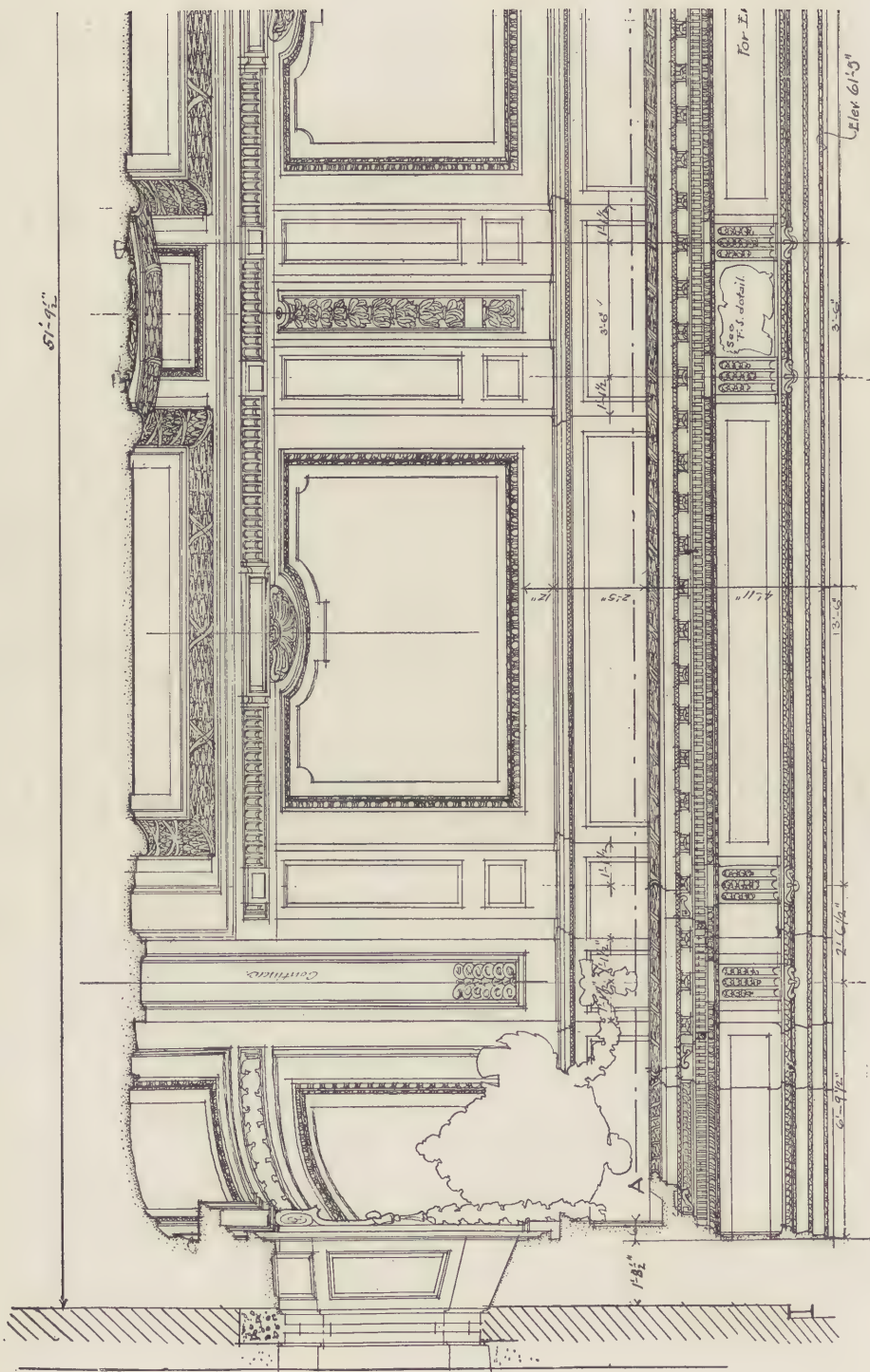


"THE HALL OF THE AMERICAS"—THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.
Albert Kelsey and Paul P. Cret, Associate Architects.

thedrals both in Latin-American capitals and in Spain. These designs were specifically suggested by the grilles in the Cathedral of Saragosa in Spain. But the ideas thus conveyed have been freely developed with the introduction of eagles and condors and tropical motives from Latin-America, the initial "A" also showing here and there. These grilles bear in each archway a pair of elaborate designed lanterns filled with clusters of electric lamps.

"Upon entering the vestibule its lofty spaciousness at once impresses the visitor with the stately character of the building. With its barrel-arched ceiling it rises through the two stories and runs the full width of the central sec-

tion. At either end two columns of "Grand Antique" black marble, veined with white, with bronze capitals and bases, mark the entrance to the corridors that connect with the office rooms on either side and the foyer adjacent to the great reading-room. There are also four pilasters of similar material and design. These handsome columns, whose capitals bear in low-relief significant designs relating to Latin-America—for instance, a conventionalization of the two great volcanoes of Guatemala—support a balcony that overlooks the vestibule from the corridor above and form admirable points of vantage whence spectators can see visitors as they enter the building. Just off the vestibule, at the



LONGITUDINAL SECTION

FROM THE ARCHITECTS' WORKING DRAWING OF THE CEILING IN THE "HALL OF THE AMERICAS," THE PAN-AMERICAN BUILDING, WASHINGTON, D. C. ALBERT KELSEY AND PAUL P. CRET, ASSOCIATED ARCHITECTS.

(For detail of the corner cartouche see page 416, and accompanying details; and for frieze detail see page below.)



NOTE: Between the triglyphs—a classic motive made interesting and individual by the introduction of characteristic elements, "Roman Trophies" translated into "Aztec Trophies."

DETAIL OF FRIEZE AND CORNICE IN THE "HALL OF THE AMERICAS," THE PAN-AMERICAN BUILDING, WASHINGTON, D. C. ALBERT KELSEY AND PAUL P. CRET, ASSOCIATED ARCHITECTS.

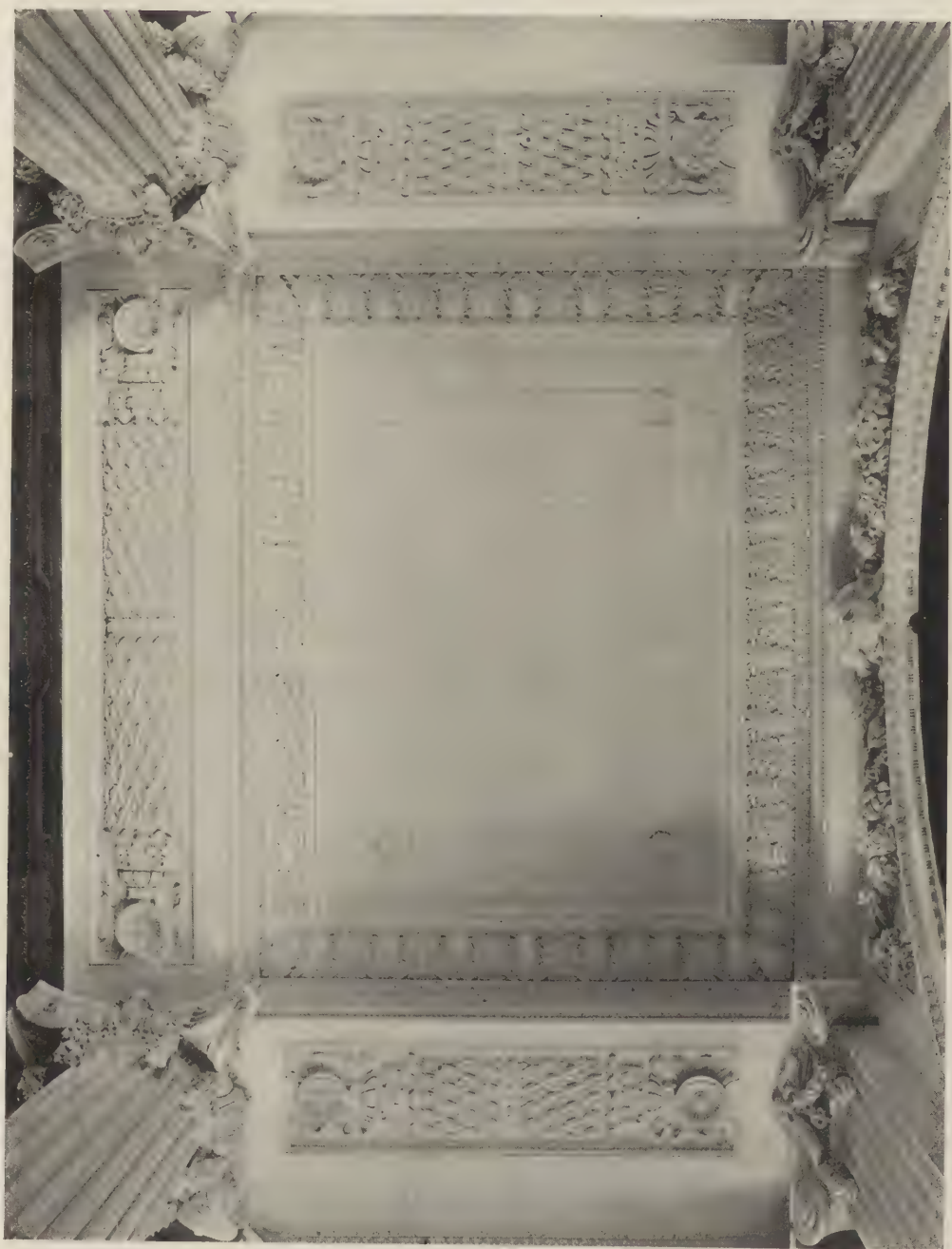


A SIDE ELEVATION "THE HALL OF THE AMERICAS," THE PAN-AMERICAN BUILDING,
WASHINGTON, D. C.

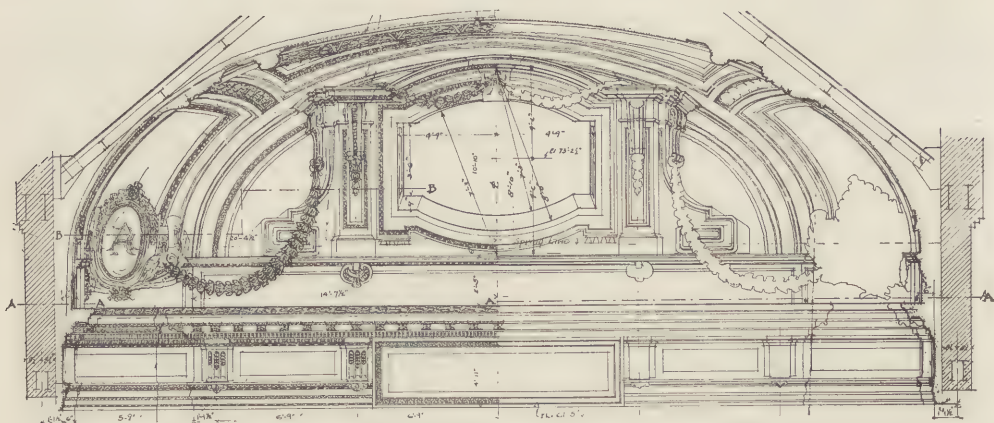
Albert Kelsey and Paul P. Cret, Associate Architects.

end of the south corridor, an elevator (not yet installed) connects with the floor above. At the south end of the vestibule is a reception room; at the north end a retiring room for ladies. The walls and ceiling of the vestibule are of imitation Caen stone. The three arches of the entrance are balanced on the opposite side of the vestibule by three corresponding arches through which one looks into the patio. Of the latter, only the central arch gives entrance to the patio; the two others are closed by the low parapets. It should be noted how the central arch in each of these triple groups illustrates the nicety with which the architects have avoided anything like a rigid adherence to conventional formulæ. The middle arch is somewhat wider than the other two. The difference is hardly noticeable to the eye, but had it not been made, the sense of the beholder would unconsciously have been oppressed with a feeling of restriction.

"It is in the vestibule that the visitor first remarks the strongly individual character of the ornament. Instead of the pleasingly elegant and ever tasteful details that might naturally be looked for in a building so intelligently designed in accordance with the highest architectural scholarship of the day—and which, therefore, would not attract particular attention, for the reason that similar details might be looked for in dozens of the best office buildings of recent date—one is confronted by striking departures from conventional treatment. The artistic effect of this unconventionality is none the less felicitous, and the circumstances that these details are derived from characteristic Latin-American or indigenous sources makes an impression so unusual as to strike even a casual beholder with a sense of difference. In such ways the design is brought very closely to the purpose of the building.



A PANEL IN THE CEILING, "THE HALL OF THE AMERICAS,"
THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.
ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.



FROM THE ARCHITECT'S WORKING DRAWINGS—END ELEVATION OF UPPER PORTION OF "THE HALL OF THE AMERICAS," THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

(For actual $\frac{1}{2}$ " scale working details see Detail Plates Nos. 17 and 18.)

"Hence, with a refinement in detail equal to that obtained under the more conventional procedure, we have throughout the building in addition to the sensuous charm that is the main function of architectural ornament, a deal of thoughtful delicacy embodied in a wealth of symbolic allusions to the theme of the work. Here in the vestibule we have a notable instance of this in some of the ornament at the ends, which was adapted from that jewel of color and richness in the outskirts of the City of Mexico, the Capilla del Pocito, the Chapel of the Well, at Guadalupe.

"From the vestibule the visitor is at once attracted to the patio, the central court. The visitor seems translated to some strange foreign scene, quaint and remote. Here the eternal tropic summer is maintained throughout the year. The fronds of great palms form the graceful culminations of a diversity of exotic foliage and Southern bloom. The unique fountain in the center flows all winter. Both fountain and plants are kept from freezing and for the entire interior including this court, an equable vernal temperature will be maintained by means of the sliding roof of glass, to be kept closed during the colder months. This piece of construction is in itself a notable achievement in engineering. It is operated noiselessly by electricity. It is in two sections; when the court is to

be open to the sky each slides back onto the adjacent flat roof of the staircase.

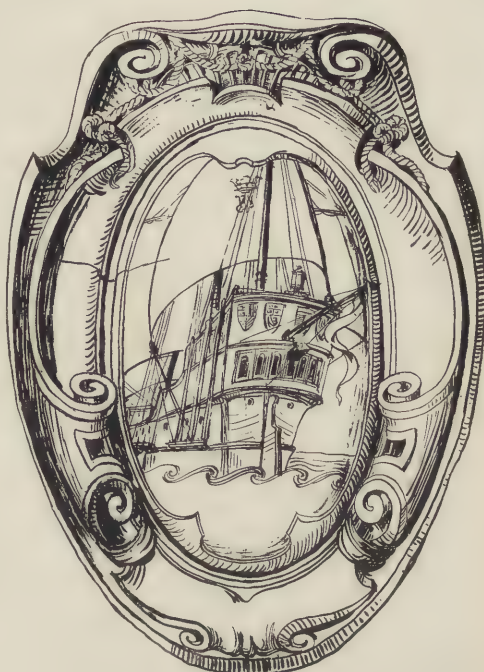
"The observing visitor will note how a leading aim in the design, kept steadily in view by the architects with reference to the character of the building as a gathering-place for large and brilliant assemblages, is the ample provision for free circulation. To this end a striking quality of openness is maintained throughout both stories. This mobility of an assembled multitude lends itself to the impressive effects gained by the dignity of proportions in the vestibule, in the great Hall of the Americas and in its adjacent foyer, the Gallery of Patriots. It should also be noted how skillfully subordinate to this function is the scheme of offices and business quarters. In this development of circulation the two wide stairways are a prime factor. In approaching the great hall on the principal floor—the *piano nobile* of Italy, the *altos* of Spain—the stairways rise directly to the second floor with an interval of spacious landings, like the stately stairs in a Roman palace of the Renaissance.

"And not only the stairs, but all the corridors, parallel and beyond are open to the patio as in the agreeable fashion so prevalent in warm climates. In this way visitors command delightful views of the patio from all directions. A notable aspect of the scene at evening is de-

rived from the circumstance that the patio itself, as befits a garden, is without direct illumination beyond what comes from the irregular play of changing colors in the fountain. All other illumination comes from the brilliant lights in the vestibule, in the staircases and in the adjacent galleries, whence the moving throngs throw shifting shadows into the garden and its foliage.

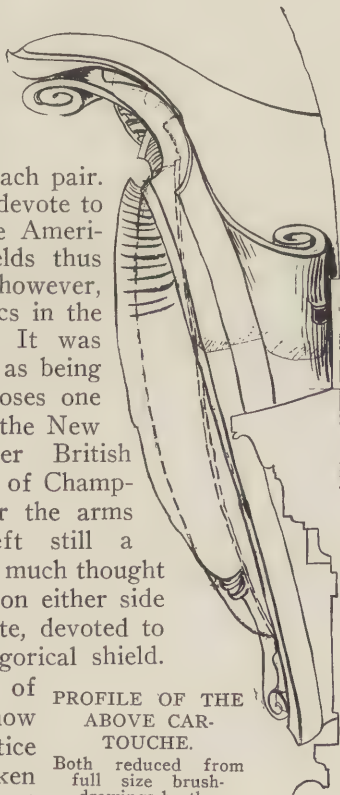
"A feature of the treatment in the patio is the pink marble curbing around the flower-beds and the fountain. This is carefully carried out on to the pavement and up eight inches. In the corners this curbing holds the soil of the four L-shaped flower-beds. All the marble work in this curbing is cut from large single stones and is ingeniously fitted together. A wainscoting of gray and dark red terra cotta around the walls is adapted from an Aztec design. The walls above are of rough white stucco supporting a polychrome terracotta frieze containing in brilliant positive colors the coats-of-arms of the various countries.

"In this polychrome frieze surrounding the patio, there are twenty-four escutcheons with a name plate between each pair. It was the intention to devote to the coat-of-arms of the American Republics the shields thus displayed. There are, however, but twenty-one Republics in the Pan-American Union. It was decided to add Canada as being to all intents and purposes one of the great nations of the New World, although under British sovereignty. The name of Champlain logically called for the arms of Canada. This left still a vacancy of two, so after much thought it was decided to start on either side of the central name-plate, devoted to Columbus, with an allegorical shield. In consequence one of these escutcheons now bears the scales of Justice and the other the broken chain that is the symbol of



ELEVATION OF CARTOUCHE
OVER MAIN STAIRS.

"Marine Transportation at the Time of America's Discovery"—The companion cartouche represents "Marine Transportation Today," embodied in a steamship.



PROFILE OF THE
ABOVE CAR-
TOUCHE.

Both reduced from
full size brush-
drawings by the
Architects.

Freedom. A noteworthy detail in the patio is the relief map of the Western Hemisphere, white on blue, in the shields over the two doors at the sides.

"Over the frieze a wooden cornice projecting seven feet surrounds the court. It is tinted in bright colors. It supports a sloping roof of Spanish tile, the scalloped edges plainly showing all around the patio, in emphasis of the Latin-American character of the place. This cornice resembles that of the patio in the Municipal Palace at Barcelona.

"From the patio one can look plainly into all the surrounding corridors and rooms through the



"THE GALLERY OF PATRIOTS," PAN AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Architects.
(The three openings to the right overlook the Patio.)

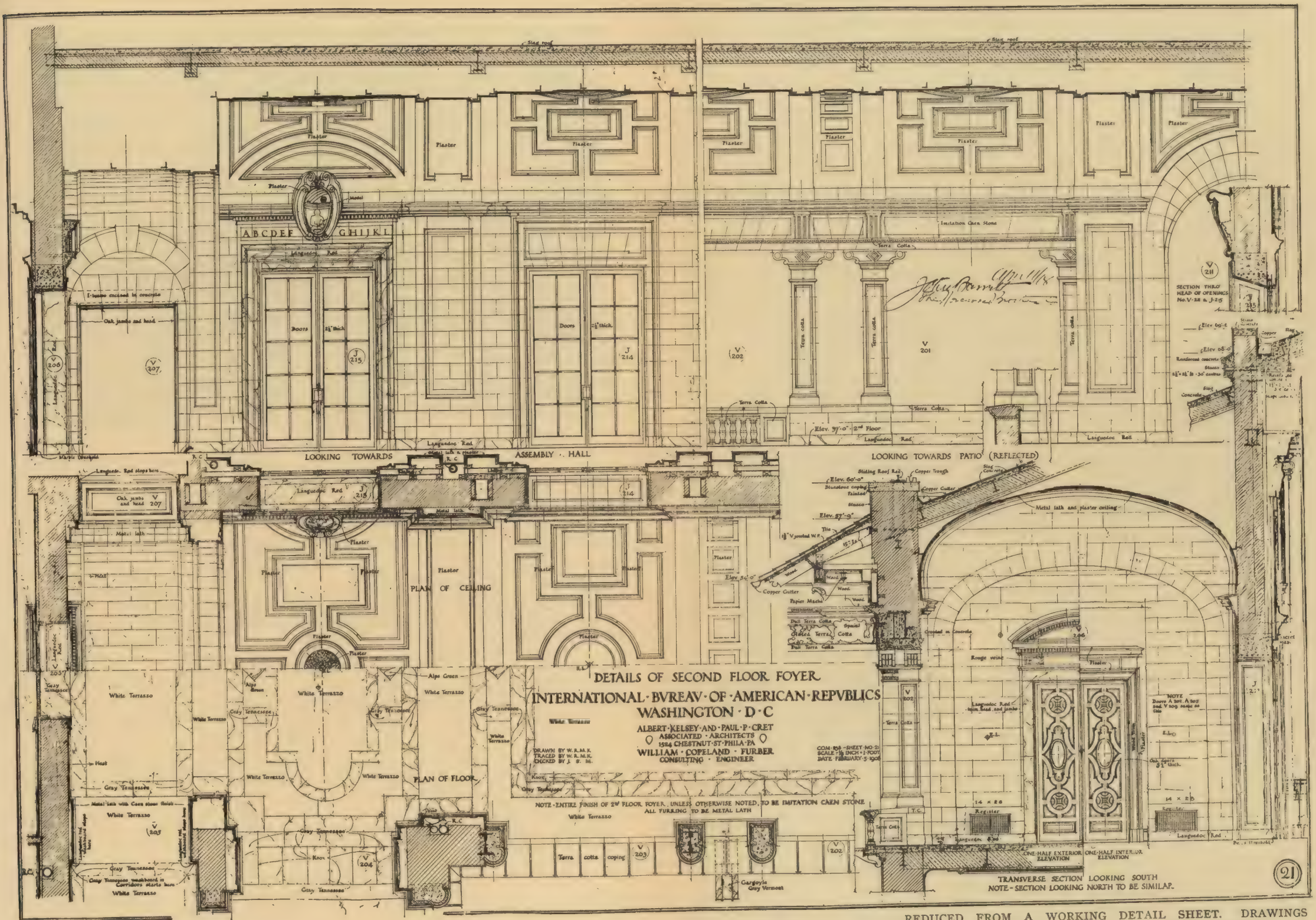


THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Detail of the "Plateresque" Doors Leading Into "The Gallery of Patriots," Shown Above.

loggia openings. The architectural and decorative quality of this court is strikingly original. While expressing most plainly its intention of embodying the Latin-American spirit, it does so in a way which combines the Old World and the New World derivations of the various nationalities that occupy the southern lands of the Western Hemisphere in an architectural impression as fascinating as it is novel. In this ensemble the florid richness of certain parts of the ornament contrast with the absolute plainness of the white stucco walls, their bareness modulated by the tropical growths that show against them. All this makes a totally opposite effect from that of the restrained simplicity of the white marble exterior.

"The fountain in the center of the patio was modeled and executed by Mrs.



REDUCED FROM A WORKING DETAIL SHEET. DRAWINGS
FOR THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.
ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.

Back of
Foldout
Not Imaged



ELECTRIC LIGHT FIXTURE, THE GOVERNING BOARD ROOM,
THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.
Throughout the building characteristic motives were woven into the details.

Harry Payne Whitney, an evolution from the architect's design. It symbolizes the continuity of the Americans on their own soil, the theme originating upon one face of the pillar in the hieratic imagery of their remote past; presenting upon another the living American as his European conqueror found him; and upon the third a figure symbolizing a future of which the beauty suggests the possibilities. The pillar referred to rises from the midst of an octagonal basin and supports a smaller similar basin crowned by a 'tholos' bearing a third and circular basin of smaller diameter from which the water descends. The lower basin, sunk in the patio floor, is paved with pink and white marble in the form of a Mexican star; between the points of this star boiling springs bubble up. At night these form an illuminated girdle under perfect control in the production of diverse effects in the way of prismatic lights.

"On occasion the national colors of the various countries are displayed in luminous running water; above, other effects

in electric illumination show in the feathered serpents of primitive American forms, and the fiery tiny jewelled eyes of these creatures seem to wink. Both the colors and the changes of water are controlled at a keyboard desk in an adjacent room. Here they can either be set playing automatically, or a performer may even make the luminous jets keep time to the music of a band. It is doubtful if any electric fountain has heretofore been reduced to so compact a compass, the mechanism so completely concealed and so ingeniously combined with sculpture.

"The basin that crowns the pillar presents upon its sides symbolic figures embodying the three chief artistic phases of the art of Mexico-Aztec, Zapotecan and Mayan. To those figures correspond upon the pillar below, the three characteristic hieroglyphic strips indicating epochs in the life of the races. These strips separate the great sculptural motives of the fountain—the three figures above referred to.

"The first of these encountered by the



THE SLIDING ROOF OVER THE PATIO.

This device is operated by electricity and was designed to shelter the tropical planting in the Patio in winter.

spectator is a warrior modelled closely upon the archaic type familiar to the sculptured 'steles' of the Aztecs and presents the Aztec civilization thus under the forms of its own highest art. The second figure is the semibarbarous American presented as a living form in a hieratic attitude that suggests the domination of the primitive mind by its own mythologies. The final figure is a woman. It half emerges, half retreats in shadow, and with its gesture of denial refuses to yield the secret that it suggests. The autochthonous serpent that mounts its side defines the object of this mystery as native, and in the widest sense American.

"In its wholly unusual design, at once vigorous and exotic, this fountain fittingly centralizes the individuality of the patio, carrying the imagination backward to the awe in the past of the land, and the mind forward toward the mystery of the future of the race.

"One of the many subtle effects provided for in the nicely studied expres-

siveness of details is to be seen in the way in which the full basin of the fountain overflows its marble lips in a sort of Moorish or Alhambra-like fashion into the surrounding channel cut in the marble border at the floor level.

"The archaic figure of the Aztec warrior in the fountain faces the entrance to the patio from the vestibule. This figure is echoed in the coarse mosaic designs that give character to the strikingly original pavement of the patio. These pavement designs are of Mayan and Incan origin. The pavement of special tile, composed of small cubes, is of dull red with figures in black. The group composed of a standing figure in profile, with two seated figures on either side, is after a stucco low relief in the palace at Palenque. The other large group of two seated figures, one cross-legged upon a throne having the design of a conventionalized animal, the other making an offering as to a god—remarkably suggestive of Buddhistic art—is after an oval low relief in stone in the wall of one of the rooms in the palace at Palenque. The repetitions of sixteen small figures are after an altar at Copan. The two large tiles on either side of the patio are after a monolithic gate or doorway at Tiahuanaco.

"A joyous and vibrant theme runs all around the patio. This may best be appreciated by passing through the vestibule and noting there the piquant mingling of strange primitive American ornament with some of the more conventional mouldings; Konti's four bronze reliefs; and finally by observing the rich elegance of the fixtures and the remarkable lantern which completes the decoration of this lofty apartment. All the fixtures were made from special designs. The lantern in particular is unique, being adorned with eagles and condors, heads of Indians, and other symbolizing details.

"Passing up the broad stairways one sees deeper and further into the building, getting a glimpse of the spacious Hall of the Americas with its large windows and noble colonnade. At the top of the stairway in the Gallery of Patriots one stands among the portrait busts of



ONE OF THE STAIRWAYS FLANKING THE PATIO.
THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associated Architects.

This photograph shows how the width of the stairway was virtually added to the total width of the patio, by the treatment of the piers.

the great men of North and South America, beneath the flags of the twenty-one republics. These flags are all of embroidered silk, uniform in size and permanently displayed as in the Henry VII. Chapel in Westminster Abbey. The busts are carried around three sides of the patio in the second story corridor; that of Washington occupies the place of honor, opposite Bolivar and San Martin, facing the central door of the Hall of the Americas.

"It is from either end of the vestibule, enclosing the patio, that the grand staircases communicate with the story above. The stairs are of Tennessee marble with easy ascent. The loggia openings of the staircase are so designed as to give unobstructed views of the scene below from both the stairs and the adjacent

corridors above. The attention of spectators all over the building, on the stairs and on the second floor, is thus carried to the patio as the focus of attraction.

"The Gallery of Patriots overlooks the patio as from a loggia. As we have seen the side galleries run alongside the two great staircases, with views commanding not only the stairs, the patio and the vestibule below, but providing on the days of large gatherings a beautiful vista that extends from the vestibule into the great Hall of the Americas.

"Adjacent to the Gallery of the Patriots on the south is the room of the Director General of the Union handsomely decorated and furnished, and in direct communication with a Board Room. There are connecting rooms for the Director General's private secretary and



A photograph admirably showing the disposition of the stairs which flank the patio. The central fountain had not been completed when this was taken.

THE PATIO AND MONUMENTAL STAIRS—
THE PAN-AMERICAN BUILDING, WASHINGTON, D. C. ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.



LOOKING INTO THE PATIO—THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

Details of the interesting patio pavement and fountain appear on following page.

stenographers. Beyond, a waiting-room for visitors to the Union communicates by corridors, both with the Director General's room and that of the Assistant Director, another handsome room occupying the southeast corner of this story. The corresponding room in the northeast corner is assigned to committee purposes.

"In the Gallery of Patriots each of the portrait busts is a contribution from one of the twenty-one republics. With the exception of the bust of Washington, a replica of Houdin's portrait, which stands free, all occupy engaged pedestals formed of severely plain square pilasters of reddish Languedoc marble. In the



The tropical planting in the patio is maintained throughout the year by means of an electrically operated sliding glass roof, which encloses the court in winter. (See page 426.)

LOOKING INTO THE PATIO—THE PAN-AMERICAN BUILDING, WASHINGTON, D. C. ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.



The view here is toward the entrance, and when snow fills the vista outside, the tropical planting in the patio is rendered remarkably exotic by contrast.

LOOKING INTO THE PATIO—THE PAN-AMERICAN BUILDING, WASHINGTON, D. C. ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.



INSIDE THE PATIO—THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

The central feature is the remarkable fountain, carved in pink marble by Mrs. H. P. Whitney.

contrast of this color with the white marble of the busts in their plastic uniformity, we have an impressive effect of monumental order beneath the splendor of the banners above. These busts are



"THE FEATHERED SERPENT OF UXMAL."

Photograph of the model for the spouting heads around the main basin of the fountain.

distributed through the two adjacent corridors as well as in the foyer. The panelled wooden ceiling of these corridors, together with the Plateresque design of the doors of the adjacent suites, contributes to the distinctive Latin-American quality of the building.

"The uncommon quality of openness that prevails throughout the interior, suiting it so exceptionally to its festal purposes, is further illustrated in the way whereby the Gallery of Patriots, as a foyer, connects with the great assembly-room, the Hall of the Americas. The Gallery of Patriots, with its vaulted ceiling and its gorgeous array of national standards above the formal ranks of portrait sculpture, serves as a richly developed overture to the culminating stateliness, the imperial magnificence, of the adjacent lofty hall with which it communicates by means of five high entrances along its side. It should be noted that in the Gallery of Patriots, on the wall opposite the staircases, are two great cartouches, with designs in low re-



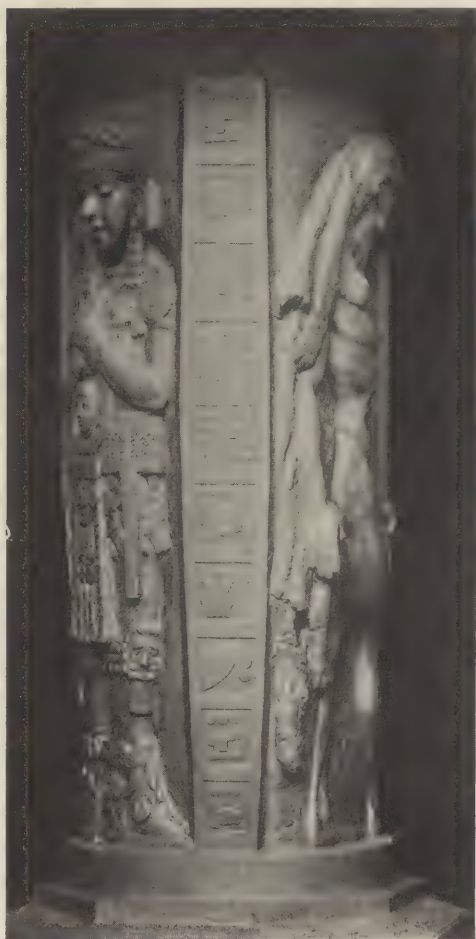
A DETAIL OF THE SHAFT OF THE PATIO
FOUNTAIN.

Carved by Mrs. H. P. Whitney.

lief that depict the ancient and modern methods of transportation between Europe and America in the shape of the caravel of the age of Columbus and the great ocean steamship of the twentieth century.

The vaulted ceiling of the Hall of the Americas, barrel-arched like the foyer and the great vestibule, is supported by twenty-four columns; the sixteen at the sides are in pairs, four on each side. These columns are fluted, with Corinthian capitals; between the columns and the walls are aisles. In the outer wall, on the garden front, five windows fill arched

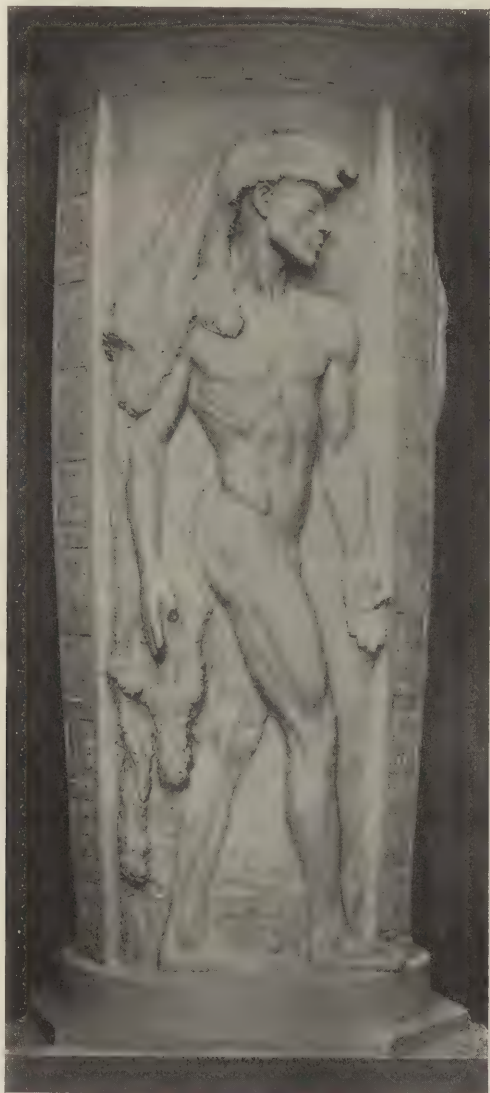
openings corresponding with the five entrances from the foyer. The plain glass of these windows is relieved by delicately designed borders in color that include the arms and other symbols of the twenty-one American nations by Nicola D'Ascenzo, whose cartoons are reproduced in Chapter II. The delicate translucent coloring in the windows is just sufficient to give a quality of design to the great arched spaces and at the same time not in the least confuse or interfere with the view. With the carrying out of the formal garden as intended, this view will be one of exceptional charm, inviting the assembled guests to stroll out-



A DETAIL OF THE SHAFT OF THE PATIO
FOUNTAIN.

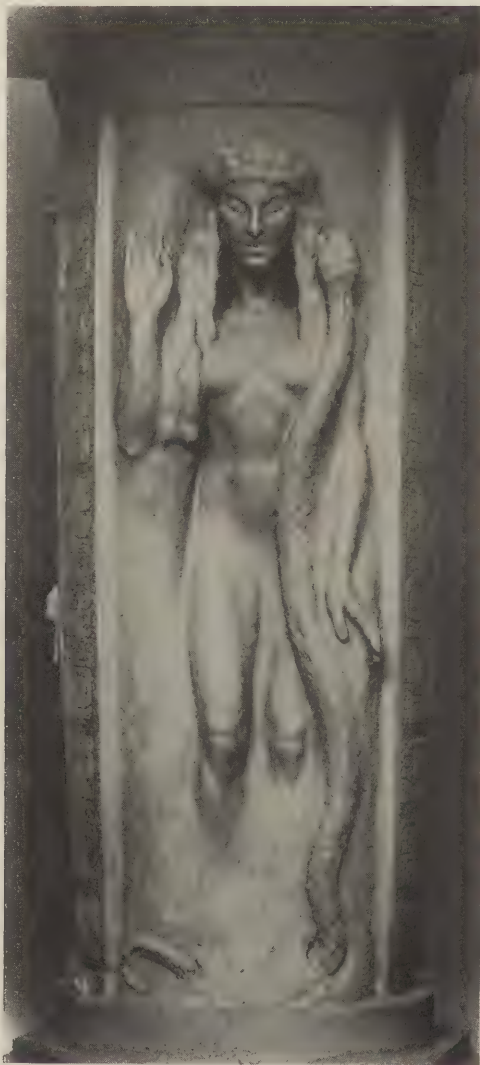
Carved by Mrs. H. P. Whitney.

side in the soft air of the long open season in Washington, during which frequent festivities will be held here. Immediate access to the garden is gained from the great hall by means of the doors at either end of the aisle on that side. From these doors broad stairs continuing in the same longitudinal direction as the aisle, descend to a spacious landing, whence another flight, turning at right angles, reaches the great terrace



A DETAIL OF THE SHAFT OF THE PATIO FOUNTAIN.

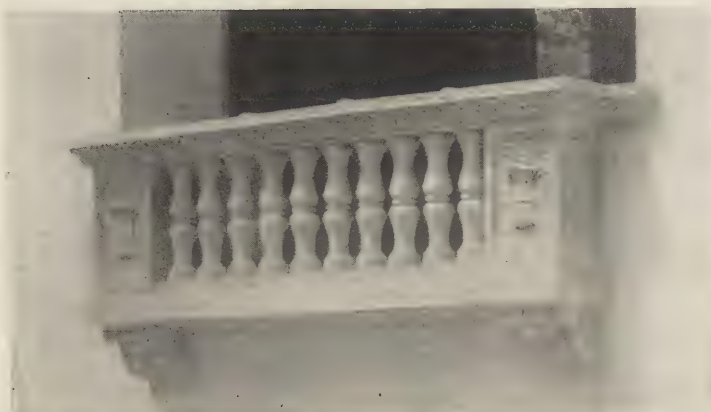
Carved by Mrs. H. P. Whitney.



A DETAIL OF THE SHAFT OF THE PATIO FOUNTAIN.

Carved by Mrs. H. P. Whitney.

on a level with the ground floor. From this terrace a short and very wide flight of steps reaches the garden level. The casements of the five windows in the hall open upon balconies that overlook the garden and the terrace below. The hall is over 100 feet long by 65 feet wide, and 45 feet from floor to ceiling. Conspicuously repeated on tablets between the capitals at the corners is the word 'Pax' which may be regarded as the shibboleth of the Union of American



DETAIL OF BALCONY IN THE PATIO—THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Republics. The floor of polished oak is laid in marquetry.

"Even in its white newness this hall is exceedingly impressive. When the contemplated color-scheme is carried out and the projected decorative paintings are in place—three allegorical subjects

in the ceiling and five in the lunettes on the side opposite the windows—the spectacle will be one of rare beauty. In the words of the number of the Bulletin previously quoted: 'One may readily imagine what a beautiful setting this room will give when an international convention, a reception to a distinguished guest, or a brilliant diplomatic reception, shall assemble within its walls.' There is no other building in Washington, either private residence, embassy or public government building, which can offer such accommodations for important functions.

"Adjoining the north end of the hall



DETAIL OF POLYCHROME TERRA COTTA FRIEZE AND SOFFIT IN THE PATIO, THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

Note the "Dove of Peace" in the soffit, and the Pan-American names and insignia incorporated in the frieze. The open cornice above is now richly colored.



DETAIL FROM THE PATIO PAVEMENT, THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

The tile work in both the main building and the annex owes much of its character and success to the studies and researches of Mr. J. H. Dulles Allen, coöperating with the architects.

is a large committee room, correspondingly rich in its architectural treatment. It is intended to be thrown open for use in connection with the great hall on festival occasions; also for the giving of moderate-sized dinners, as for a gathering of the Governing Board or for a state occasion by some diplomat.

"The Board Room at the south end of the great hall and connecting with it in the same manner, is of exactly the same dimensions as the room on the north. It is one of the show rooms of the build-

ing; it is intended for the regular meetings of the Governing Board of the Pan-American Union. A luxuriant richness is the distinctive quality. The whole color scheme, including ceiling, floor and rug, is in brown and gold. The walls are covered with a dull yellow brocade up to the line of the gilded bronze frieze. The furniture in this room, unique in its elegance of design, is of Dominican mahogany and Spanish leather. The table is oval, twenty feet long and nine feet wide. Each chair bears the name and



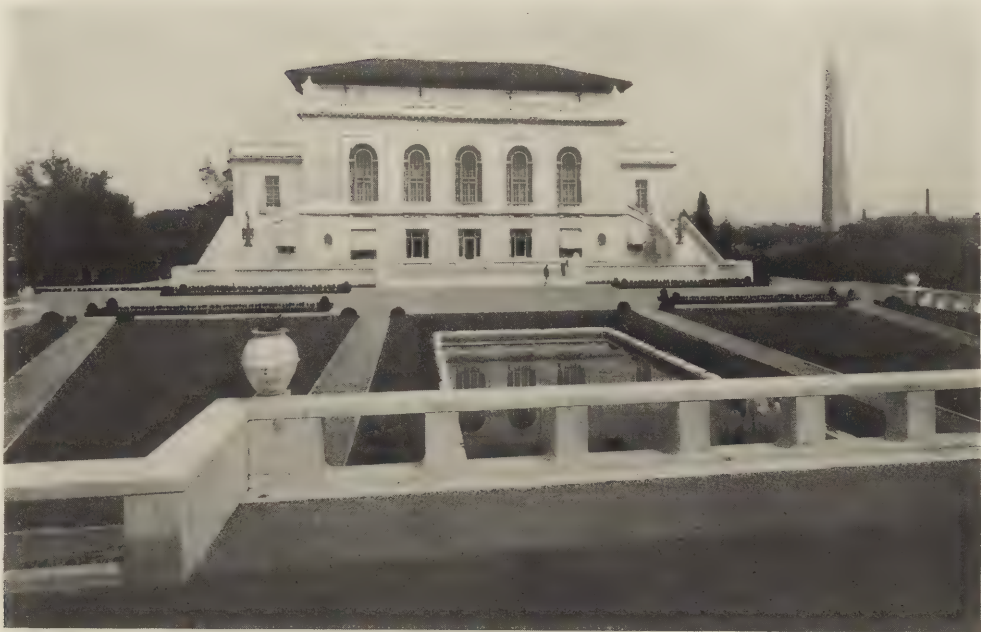
THE PATIO FOUNTAIN ILLUMINATED BY NIGHT—THE PAN-AMERICAN BUILDING,
WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

the coat-of-arms of one of the countries in the Union. Both chairs and table are of Spanish design with an accent suggestive of Latin-America.

"A feature of this room is the frieze, its four panels divided into sections with

a Churriguesque flavor. These panels were conceived and modelled by Mrs. Sally James Farnham, of New York. They are two feet and nine inches high; the two at the sides are each twenty-five feet long; those at the ends nine feet six



THE REAR ELEVATION OF THE PAN-AMERICAN BUILDING FROM THE TERRACE OF THE ANNEX.

Albert Kelsey and Paul P. Cret, Associate Architects.

It is proposed to fill the openings in the terrace balustrade with translucent blue panels. The main cornice of the building, which seemed dark and heavy, is now richly decorated in blue and yellow.

inches long. Their subjects illustrate early struggles and decisive events in the history of the New World.

"On the south wall is the South American panel. Its five sections typify the beginning of history in South America and the heroes and types of the North and South in that part of the Western Hemisphere.

II.

In the foregoing text Mr. Barrett has ably set forth, in terms descriptive and explanatory, the purposes and intentions of The Pan-American Union, as well as the actual disposition and architectural nicety of the building which houses it. At the time Mr. Barrett's text was written The Pan-American Annex had not been built.

It is the purpose of the following text to recapitulate certain architectural conclusions which have been brought out in the liberal quotations from Mr. Barrett's book, and set forth in the careful notes accompanying the illustrations, and to present as well certain other aspects of this architectural achievement germane to

its significance to the profession at large.

Certain salient points are apparent, that the architects had a clear idea of the elemental parts of their design even in the first studies for the plan before rendering it for the competition is evidenced in the reproductions of some of these first sketches in the first part of this article. That this conception of the plan was ably considered is evidenced from the fact that the plans as submitted in competition were carried out virtually inch for inch in the executed building.

In the matter of the design of the exterior, considered from the point of the *composition* of its more salient features, greater changes were made when the competition drawings were translated to scale working drawings.

In the matter of the *detail* throughout the building, the changes made, first from the sketches to the competition drawings, second from these to the working drawings, and third from the working drawings to the executed work, were radical and absolute.

The nature of these changes is care-



DETAIL OF A PORTION OF THE REAR ELEVATION, THE PAN-AMERICAN BUILDING,
WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

This photograph shows the specially designed monumental lamp in place on the building.

fully and clearly set forth in the notes accompanying the illustrations—suffice it to say here that, in point of expression of the structure within, the exterior was entirely re-cast from the competition drawings to achieve such expression, and that

in point of detail throughout the building, each detail as well as the sum total of all, making up, in the competition drawings a well enough mannered but quite commonplace or nondescript building, were changed in the working draw-

Concrete
1/2" single lath
3/4" banded slippers, spaced 24" on centers
and embedded in concrete
terra cotta

Y

DRAWN BY

DRAWN BY L H
 TRACED BY C W S
 CHECKED BY J S M

Ludovici Tile - T 12

Corner of

COM-238-SHEET-NO.16
SCALE- $\frac{1}{2}$ INCH = 1 FOOT
DATE-FEBRUARY 5 1906

COM-208. SHEET. NO. 16
SCALE - 1/2 INCH = 1 FOOT
DATE - FEBRUARY 5 1906

DRAWN BY E H Y
TRACED BY C W S
CHECKED BY J S M

TRACED BY C W S
CHECKED BY J S M

wiciTls -T 12

SECTION THRO' BALUSTRADE

4" x 6" Copper Conductor

Elev. 73'-0"-y

lev. 68'-0"

reinforced concrete with stucco finish

PLAN OF CORNIC LOOKING TIP

SECTION THROUGH TOP FLIGHT OF STEPS

SECTION THROUGH TOP FLIGHT OF STEPS

SECTION THROUGH TOP FLIGHT OF STEPS

Elev. 59° 9' 5"

Elev. 55'-9"-

Brick corbelled out

to fit shape of Quoins

See Section on Sheet No 15)

of Float Glass Panel - 30' x 6' -

Stucco ornament-

Ceiling of At. 1101-7

[illegible]

Painted concrete steps
with cement finish

DETAILS OF PART OF REAR ELEVATION

NOTE - FINISH OF ENTIRE FACADE, UNLESS OTHERWISE NOTED, TO BE STUCCO &

16

ARCHITECTURAL RECORD DETAIL PLATE NO. 20.
ISSUE OF NOVEMBER, 1913.

ISSUE OF NOVEMBER, 1913.

REDUCED FROM A WORKING DETAIL SHEET. DRAWINGS
FOR THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.
ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.

Back of
Foldout
Not Imaged



DETAIL OF BRONZE LAMP STANDARD, THE
PAN-AMERICAN BUILDING,
WASHINGTON, D. C.

Many interesting aboriginal motives have been woven
into the design.

ings, and even in the work in process of execution, to details at once appropriate, characteristic, and expressive of the origins and purposes of the specific building which they adorn.

Certainly the most important factor in bringing about the building for the Pan-American Union as it stands today is to be found in the earnestness and enthusiasm of the architects and the remarkable degree of sympathetic coöperation shown toward the architects by those in charge of the official disbursements. The building is in fact, a monument to the splendid results of coöperation and intelligence.

In the course of the work all designs were submitted for discussion to Mr. Elihu Root (then Secretary of State,) Ambassador Nabuco of Brazil, and many representatives of Latin-America, and finally all passed under the "acid test" of consideration by Director General Barrett, thus it came about that many conceptions were designed only to be discarded, and that many once adopted were re-designed repeatedly, in several cases three models were made and set aside, and finally, owing to close personal superintendence, many finishing touches were put in the actual execution.

An instance of this may be had in the detail of the cornices of the pylons. Here a conventional rosette, first intended to repeat was alternated with a rosette embodying a five-pointed star, the symbol of nine of the American Republics—and this change was made after the stone-cutters had begun carving the rosettes in place.

Mr. Root on one occasion is quoted as having expressed the opinion that *any architect who feels that he is doing justice to his work by blindly executing his original drawings, without calling for constant changes and extras as the work progresses, is dead.* This statement should be of far-reaching import to the architectural profession, in that its absolute truth is to be equalled only by the denial with which it is met by the average client or building committee. Whereas these factors in any building project, from a modest country cottage to a



A DETAIL SHOWING UNUSUAL TREATMENT OF MEDALLIONS IN THE MAIN CORNICE,
THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.
Albert Kelsey and Paul P. Cret, Associate Architects.

A change in the rosettes in the frieze was made after the actual carving was commenced. The foliated rosette was alternated with one introducing a five-pointed star, the symbol of nine of the American Republics.

state capital, are pre-disposed to look askance at the architect who applies for extras, implying or stating that the architect either did not know his business when he made his first drawings, or desired to increase his commission by increasing the total cost of the work over the original estimate. There are points in the design and execution of an architectural project, however, which the lay mind cannot be more reasonably expected to appreciate than some fine point in a law case, or some nicety of medical practice. A building, by its very nature,

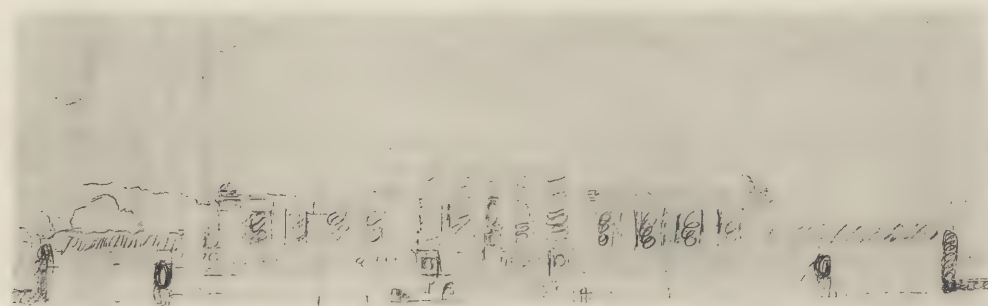
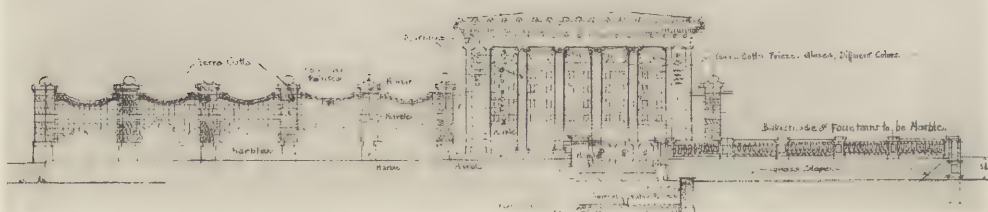
calls for change, sometimes minor, often radical, during its progress, and these changes, in manner to be understood as impossible to foresee, can be appreciated only by one who has been in actual practice. The client who refuses a reasonable extra for the permanent improvement of the work in hand is a little less intelligent than an individual who would refuse to let his tailor take an extra measurement which would insure the perfect fit of his suit, because the building is a permanency, a monument for posterity, and the suit is not. Those



A DETAIL OF MOULDINGS, SHOWING THE SKILLFUL INTRODUCTION OF ABORIGINAL MOTIVES IN PLACE OF CLASSIC MOTIVES.

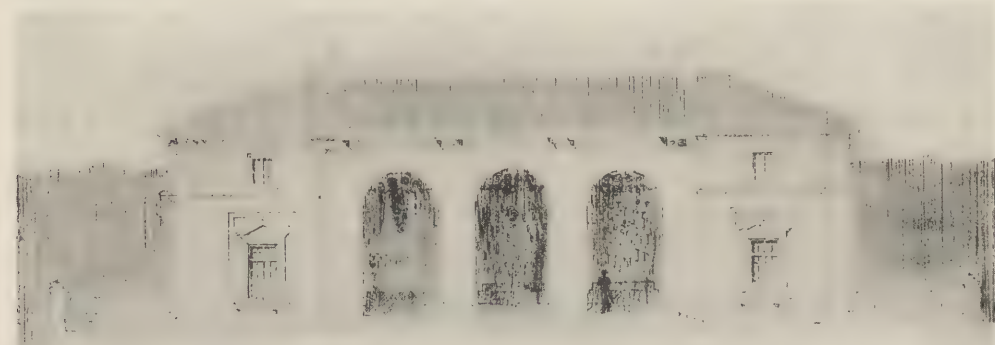


A DETAIL OF ADAPTED ABORIGINAL MOTIVE ON THE BASE OF THE BUILDING,
THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.
Albert Kelsey and Paul P. Cret, Associate Architects.



TWO TENTATIVE PRELIMINARY STUDIES FOR THE PAN-AMERICAN ANNEX.

It was originally intended to treat this addition merely as a theatrical "back-drop" for the garden. It was to be little more than a screen.



THE PRELIMINARY STUDY SKETCH CONTAINING THE IDEA OF THE ANNEX AS EXECUTED. THE PAN-AMERICAN BUILDING, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

who wish ready-made architecture should be consistent by wearing ready-made clothes.

Returning to the case in hand—a few general comments on the Pan-American building may serve to further illustrate its importance in ways reaching far beyond its intrinsic merit.

It is one thing to design a well proportioned organic structure and quite another to seize the essence from a score

of countries, and with it epitomize the aspirations and characteristics of each, in a building truly Pan-American. It is one thing to follow the rules skilfully; it is quite another to add life and interest to the most perfect of skeletons. The first is Architecture, but the second is something besides, for it is likewise Art. Not that Architecture is not an Art, but that some Architecture is more compelling and, therefore, more intellectual and



THE PAN-AMERICAN ANNEX, AS SEEN ACROSS "THE BLUE AZTEC GARDEN," FROM THE UPPER STAIR LANDING AT THE REAR OF THE MAIN BUILDING.

Albert Kelsey and Paul P. Cret, Associate Architects.

artistic than other architecture. There are other good buildings in Washington, but where is there one that has so much to say, that commands so much attention, that exerts such an influence? Where else is there one that tells such a continuous story in which "all the circumstances in the tale answer one another like notes of music?"

In the words of Mr. Root, on the occasion of the dedication—"The architects, "who, not content with making this structure express their sense of artistic form and proportion, have entered with the devotion and self-absorption of true art into the spirit of the design for which their bricks and marble are to stand. They have brought into happy companionship architectural suggestions of the North and of the South; and have brought into construction and ornament, in a hundred ways, the art, the symbolism, the traditions and the history of all the American republics; and they have made the building a true expres-

sion of the Pan-Americanism of open mind and open heart and all that is true and noble and worthy of respect from whatever race or religion or language or custom in the Western continents."

A trip to Cuba, Yucatan and other parts of Mexico contributed much to the design, a chance call while there upon M. Benard, the architect of the new Legislative Palace in the City of Mexico, resulted in a valuable criticism, which increased the apparent size of the patio nearly 40 feet. (See pages 427-428). Books of travel and books on archaeology were studied, the museum in the City of Mexico, the National Museum in Washington, the Natural History Museum in New York, and the Archaeology Museum of the University of Pennsylvania were ransacked.

Gradually the Pan-American idea began to be visualized—that is, the idea of a closer union between the inhabitants of the countries of the Western hemisphere with their varied civilizations con-



THE PAN-AMERICAN ANNEX FROM THE CENTER OF "THE BLUE AZTEC GARDEN."

The tiles lining the pool are blue, and this color note will be echoed by a hedge of blue hydrangeas behind the open rail. The panels of the rail will be filled with blue faience, which may be illuminated by night.

trasting climatic conditions—the idea of running a consistent theme through the entire building seized the architects, and after the general disposition of parts had been settled and the proportions of the exterior and interior had been determined they set about to give the build-

ing expression—to make it significant and interesting.

Proportion, however, was held of prime importance. The height of the building was raised, at Mr. McKim's suggestion, until it grew from a building of long and low appearance to one



THE PAN-AMERICAN ANNEX AS SEEN IN DIRECT ELEVATION FROM THE LOWER REAR TERRACE OF THE MAIN BUILDING.

Albert Kelsey and Paul P. Cret, Associate Architects.



THE PAN-AMERICAN ANNEX AND ONE END OF THE POOL IN "THE BLUE AZTEC GARDEN."
 Albert Kelsey and Paul P. Cret, Associate Architects.

of relative height—and at the very last moment, after the working drawings were finished, it was decided to raise the ground level five feet, which was accordingly provided for in the specifications. It has since been regretted that it was not raised two or three feet more. The fact that this change was not made until the last was not due to a misconception or miscalculation, but to the fact that Mr. McKim insisted on the location of the building thirty or forty feet back from the street—further than originally intended, thereby helping the appearance of the front, but quite destroying the idea of a long garden at the rear. The front elevation was to interpret the two grand geographical divisions of Pan-America, and in the carrying out of this idea the architects were ably seconded by Mr. Isidore Konti and Mr. Gutzon Borglum, who have depicted in their colossal groups the spirit of mod-

ern progress now animating North and South America respectively. Then, wherever the architect could find a chance to recall the Spanish, Portugese, French and English origins of the people constituting this union, they have done so, while in the patio pavement, the fountain and the colossal allegory under the loggia of the annex, they have attempted to recall something of the mystery of that strange twilight time in American history which still baffles the savants of the world, to the advanced civilization of the early Peruvians, Mayas, Zapotecas, Toltecs, Aztecs and others, and in many spots have reproduced "The Feathered serpent of Uxmal," a symbol as familiar to archaeologists as the Sacred Scarab of Egypt.

Every detail, every bit of sculpture, every introduction of color, material, every piece of furniture, every tree and plant were discussed with a view to ap-



DETAIL OF THE SOUTH AMERICAN INDIAN FIGURE ON THE LONG AXIS OF THE POOL IN "THE BLUE AZTEC GARDEN," THE PAN-AMERICAN ANNEX, WASHINGTON, D. C. ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.

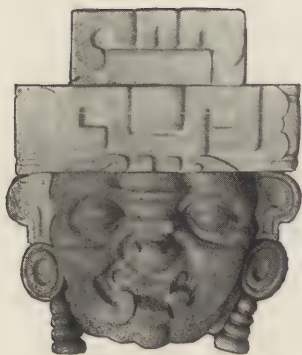


DETAIL OF THE WORK IN THE LOGGIA OF THE PAN-AMERICAN ANNEX,
WASHINGTON, D. C.

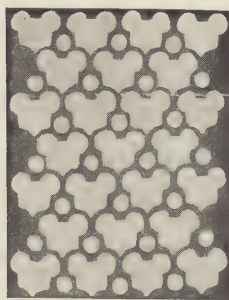
Albert Kelsey and Paul P. Cret, Associate Architects.

J. H. Dulles Allen, Co-operating

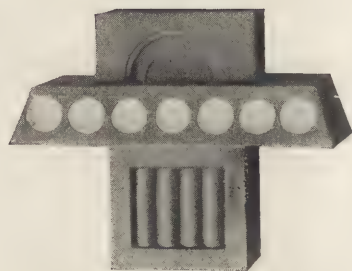
The color scheme is remarkably rich. The lower portion is executed in a range of blues, greens, and blue-greens, the frieze of relief panels of Aztec figures is tan-color, and most of the remainder is a rich-deep red, relieved by incidental introduction of vivid colors.



Detail of Corbel Head under large beams, executed in pastel tan, the upper lip and circular ear-rings overglazed coral red. Executed from architects' full size drawing after a photograph of an Ancient South American Sculpture.



Detail of Pool Tiles.



Detail of Conventionalized Serpent's Tooth after those in the "House of the Nuns" at Chichen Itza.



Birds and small animals from textile designs of the Incas after Reis & Stubel. Introduced in the frieze of the Annex Loggia.

DETAILS OF TILE WORK IN THE LOGGIA, ETC., OF THE PAN-AMERICAN ANNEX.

The sides of the pool are lined with tiles of special design, taken from details furnished by the architects. The three-inch tiles are glazed turquoise blue, with a variation from lighter to darker tones. The small round dots are one inch in diameter, and are mostly glazed the same blue as the three-inch tiles, but in the ratio of one to six are introduced red-purple and blue-purple.

propriateness and significance, the discussions originating between the two associated architects, and terminating with Director-General Barrett.

From the telling note of aboriginal art and history in the studiously designed lamps on the front terrace, through the frank symbolism of the portrayal of North and South America on the great pylons of the front elevation, through the beautifully detailed bronze entrance grilles, through the interior, out to the again unique and characteristic lamps at the rear, and garden and terminating Annex, there is a consistent expression of the dominant themes of the building.

The various sculptors and craftsmen associated with the work were brought, in their contributions, into intimate sympathy with the architects. Isidore Konti and Gutzon Borglum and Solon Borglum were the authors of the groups and other sculptural details of the façade. Mrs. H. P. Whitney executed the remarkable fountain in the patio and its tile floor,

and the absolutely unique and amazing tile work in the annex resulted from the studious co-operation of Mr. J. H. Dulles Allen with the architects. Mr. Samuel Yellin, craftsman in iron, produced a remarkable achievement in wrought iron for the Annex, and Mrs. Sally James Farnham modelled the frieze of historical panels in the governing board room of the main building. There was harmony and accord throughout, among architects, sculptors, craftsmen and directing officials.

To Charles F. McKim is due credit for several invaluable criticisms which materially changed the proportions of the design; to Secretary Root is due credit for conciliating the rivalries of the different Ministers and Ambassadors interested and each more or less anxious to give a picture of his own country undue prominence, and to Director-General Barrett is due the most credit of all for his constant helpfulness and eager interest in every detail which would in any



Detail of a large tile in Frieze. Executed in Pastel Tan. Back ground glazed turquoise blue, ear-rings and nose ornaments over glazed gold, bronze, etc.



DETAIL OF TILE WORK IN THE LOGGIA OF THE PAN-AMERICAN ANNEX,
WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.
J. H. Dulles Allen, Co-operating

way improve the design. Many mid-night conferences were held with him, many trips of investigation were made with him, and, although the association between Messrs. Kelsey and Cret has

come to an end, with real foresight the Director-General has entered into a permanent agreement with Mr. Kelsey whereby he remains in charge of the buildings and grounds. New work, re-



WINDOW DETAIL, THE PAN-AMERICAN
ANNEX, WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.

storations, refurnishing and decorating, the care of the grounds, future development, and in fact all matters pertaining to the physical welfare of the property are now in his charge, and as the Director-General is determined to continue and perfect the work, it is confidently to be expected that the great triple allegory

or mural painting to adorn the ceiling of the Hall of the Americas will materialize before long, that the Blue Aztec Garden will be made a more positive expression of its descriptive name, that the rear terrace and front pavements now of cement will ultimately be replaced by characteristic and appropriate mosaics.

Already under the new arrangement, a series of strange bronze curtain hooks is being made by a sculptor to adorn some of the apartments, a color scheme for the main cornice is being carried out to replace the heavy and uninteresting verdegris copper effect; two great macaws, and standards for them, have been placed in the patio and some beautiful specimen fish have been placed in the patio fountain. All such details, even to the lettering of temporary inscriptions are under Mr. Kelsey's charge and he is, moreover, required to make a written report four times a year on the physical condition of the property with such suggestions as to its further development as he sees fit.

The gardening is only just begun, the grand divisions have been fixed, the gravel surfaces and marble copings are complete, but the planting still requires much attention. Some big deciduous trees at the present writing are being set out.

The idea embodied in the fanciful name for this garden—"The Blue Aztec Garden"—is to be carried out more fully than at present. In addition to the blue, or blue-green color of the lower part of the tile wainscoting in the loggia of the Annex, and the blue of the tiles which line the pool, Mr. Kelsey proposes to fill the rectangular openings in the garden balustrade with panels of translucent blue faience, or other material, which may be illuminated at night, and he proposes, as well, to plant behind this a hedge of blue hydrangea bushes, so that the scheme will be equally effective by day and night.

The garden pottery, now far too Italian in suggestion, will be replaced by special pieces in blue and yellow and lavender, moulded in aboriginal shapes. No part of the entire design is to be out of harmony with the great underlying idea

of character and individuality in the entire scheme.

To what extent imagination, patience and enthusiasm entered into the development of this scheme is well illustrated by the night effects, the great bronze lanterns in front of the building are adorned with a strange and beautiful barbaric ornament and the lower tiers of glass therein depict a series of Aztec gods and monsters. The mere mechanical process of having this glass embossed required prolonged investigations among the glass manufacturers on both sides of the ocean. The brilliant illumination so cleverly worked into the bronze grilles under the three front arches of the main building, is a distinguished feature, but it is not until we come to the patjo and to the illuminated fountain, that an exotic spirit is introduced into the illumination itself. Here the mechanical equipment is ingenious and effective, the feathered serpents have green jeweled eyes, which wink at intervals, illuminating the pink marble behind them with a strange translucence, while from the Mexican star in the bottom of the lower basin jets and sprays, and wheat-sheafs of water play the national colors of the twenty-one republics, either in rotation or singly, as may be desired according to whether the occasion is purely a national entertainment given by the representative of one country or whether it is an international gathering. The grand climax so far, however, is in the illumination of the strange archaic allegory in tile under the arches of the Annex loggia at the rear of the grounds. By pressing a button located near the central window of the hall of the Americas a strange blue-green radiance falls over the polychrome design and it is at once given a weird purplish tone which is reflected in the pool below. But this does not complete the scheme, for the architects expect next year to tear out the bottom of the pool and under the pedestal, now supporting the crude statue of a prehistoric Indian, they intend to produce a sublactarine effect, and after the moon has set and the stars have gone to sleep a beautiful coral reef of translucent marble will define itself slowly,



DETAIL OF WROUGHT IRON WINDOW-GRILLE,
THE PAN-AMERICAN ANNEX,
WASHINGTON, D. C.

Albert Kelsey and Paul P. Cret, Associate Architects.
Samuel Yellin, Craftsman.

surely and with clearness making all beholders feel something of the lure and wondrous charm of the tropic seas. Phosphorescent lights appear and dis-



THE STREET ENTRANCE. THE PAN-AMERICAN ANNEX, WASHINGTON, D. C.
Albert Kelsey and Paul P. Cret, Associate Architects.

appear, and then in the place now occupied by the Indian, by a stroke of modern magic the statue of Universal Peace will burst forth and dominate all. In the bottom of the basin polychrome terra cotta will be used as well as marble to represent strange marine growths, long trailing seaweed in pale greens and faded yellows, stubby corrugated sea-

weed in dull reds; purples and greens and white terra cotta running through opalescent shades of lavender will reproduce brain, stag, and other kinds of coral peculiar to the waters of the Caribbean.

Mr. Kelsey is now at work decorating the cornice of the main building to echo the color scheme of the "Blue Aztec

Garden," and hopes, before long, to have the cement floor of the main terrace replaced by tile and marble, with a procession of grotesque blue pigmies and other archaic figures.

The entire scheme, now unique in its studious application and introduction of characteristic detail, will be, when it is completed in all details, one of the most remarkable in the world. Certainly, in its present state, it should constitute a criterion for really conscientious architects in every public library, museum, state-house or other monumental building. There are scores of instances where a little study in the production of symbolic detail—in the expression of something of the history or purposes of the building would have raised many otherwise successful structures to a plane of interest equal to that of the Pan-American building.

If captious critics rise to sneer at some of the lighting effects—if it is submitted that in these the architects attempted to win the gallery by a *tour-de-force*, achieving purely theatrical effects out of keeping with the traditional dignity of monumental architecture—their answer lies in the statement that these effects were

planned with as much consistency as was shown in every detail of the work. The Latin-American, by nature and heritage, is highly temperamental, and deeply impressed by the superficially pleasing, and it was intended to give visiting South Americans not only the sudden warmth of personal pleasure and gratification, but to give them, as well, wondrous tales to carry back, of the marvellous home of all the Republics in the capitol city of the great United States.

In a farewell address, Ambassador Brice, of the British Embassy, said: "The Pan-American building seems to me to be one of the most finished and graceful and happily conceived and executed building that has been erected anywhere within the last thirty or forty years," and Mr. Andrew Carnegie, the donor, said he considers it "The most beautiful building in the world after the Taj Mahal."

Certainly it is in every sense the successful result of happy and intelligent collaboration. It would have been a very different building if it had been produced by officials or architects alone, or by both in the too-often-existing spirit of bitter variance.



THE PAN-AMERICAN ANNEX AT NIGHT, AS SEEN FROM THE CENTRAL WINDOW AT THE REAR OF THE MAIN BUILDING.



The columns are of antique black and white marble, with bronze capitals incorporating the arms of several of the most important Latin-American cities.

ONE END OF THE ENTRANCE LOBBY. THE
PAN-AMERICAN BUILDING, WASHINGTON,
D. C. ALBERT KELSEY AND PAUL P.
CRET, ASSOCIATE ARCHITECTS.



PROFILE OF THE "SOUTH AMERICA" GROUP AT NIGHT.
THE PAN-AMERICAN BUILDING, WASHINGTON. D. C.
ISIDORE KONTI, SCULPTOR.
ALBERT KELSEY AND PAUL P. CRET, ASSOCIATE ARCHITECTS.



INTERIOR OF AN EGYPTIAN TOMB.

The ceiling and walls are painted in obvious imitation of woven fabrics. Note especially the textile character of the ceiling.



THE TEMPLE OF HORUS, EDFOU, EGYPT.

The screen between the outer and second court-yards shows round columns based on the original bundles of water-reeds, bound in figured lengths of woven cloth, and the inter-columnar spaces repeat the figured hangings, or rugs. All was brilliantly colored in imitation of the textile originals.

TEXTILE ORIGINS IN ARCHITECTURE

A THEORY OF EVOLUTION

BY CHARLES DE KAY

I.



ARCHITECTURE PRESENTS to our minds an idea of the heaviest and most impermeable of the works of man, structures of wood and brick, stone and iron; while textiles suggest flimsy and portable materials, from the gossamer creations of Indian

looms to rugs and tapestries that can be folded up, despite their solidity and weight, and borne from place to place. Architecture includes the pyramids, veritable mountains of dressed stones; and textiles include weavings so delicate as to vie with the work of the spider and

cause the old poets of Finland to sing of nymphs of the air who weave with sun-rays and moonbeams for web and warp. And yet, when we follow man about the globe, and watch him at his labor of home building, palace raising, temple edification, it is well to keep these flimsy toys in mind, using them like a thread of Ariadne as a clue to lead one through the architectural labyrinth.

By way of analogy, let us consider the origin of pottery and porcelain. We can spy out the steps of primitive man, skilled in the fabrication of basketry to the point of making bowls of plaited work which will hold water, close-woven baskets in which food is boiled by dropping hot stones into the water. We can see how primitive man made the



The great Hall of Columns, Karnak, Egypt, sets forth clearly the origin of columns in masses of palm trees or lotus stalks, covered by brilliant work of the loom and kept in shape by bands. The ceiling represents a canopy suspended overhead.

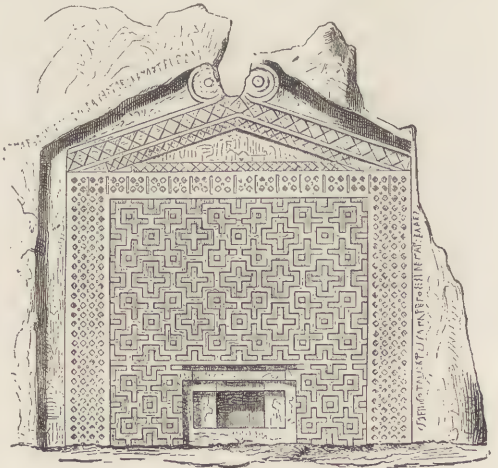
(Illustration from G. Rawlinson, *Ancient Egypt*.)

discovery that clay, daubed upon the outside of a basket or woven bowl, could be hardened by fire. So pottery took its origin. Now this echo of basket-work ever keeps resounding down the long line of improvements in fictile ware. As the early weaver of baskets worked in spirals from the bottom, round the belly of the piece, to the lip, so the potter laid his strands of wet clay in long spirals and built up his pot on similar lines, hardening his work in the fire inside and out, sometimes learning to glaze for greater solidity and to prevent porosity, later using colored glazes for beauty.

Long before that time men were plaiting grass, or strips of bark, or split reeds, or twisted fibres into cloaks and sandals, shields and defensive armor. Mats were woven to protect him from the damp earth and the hot sun. Fastened to up-

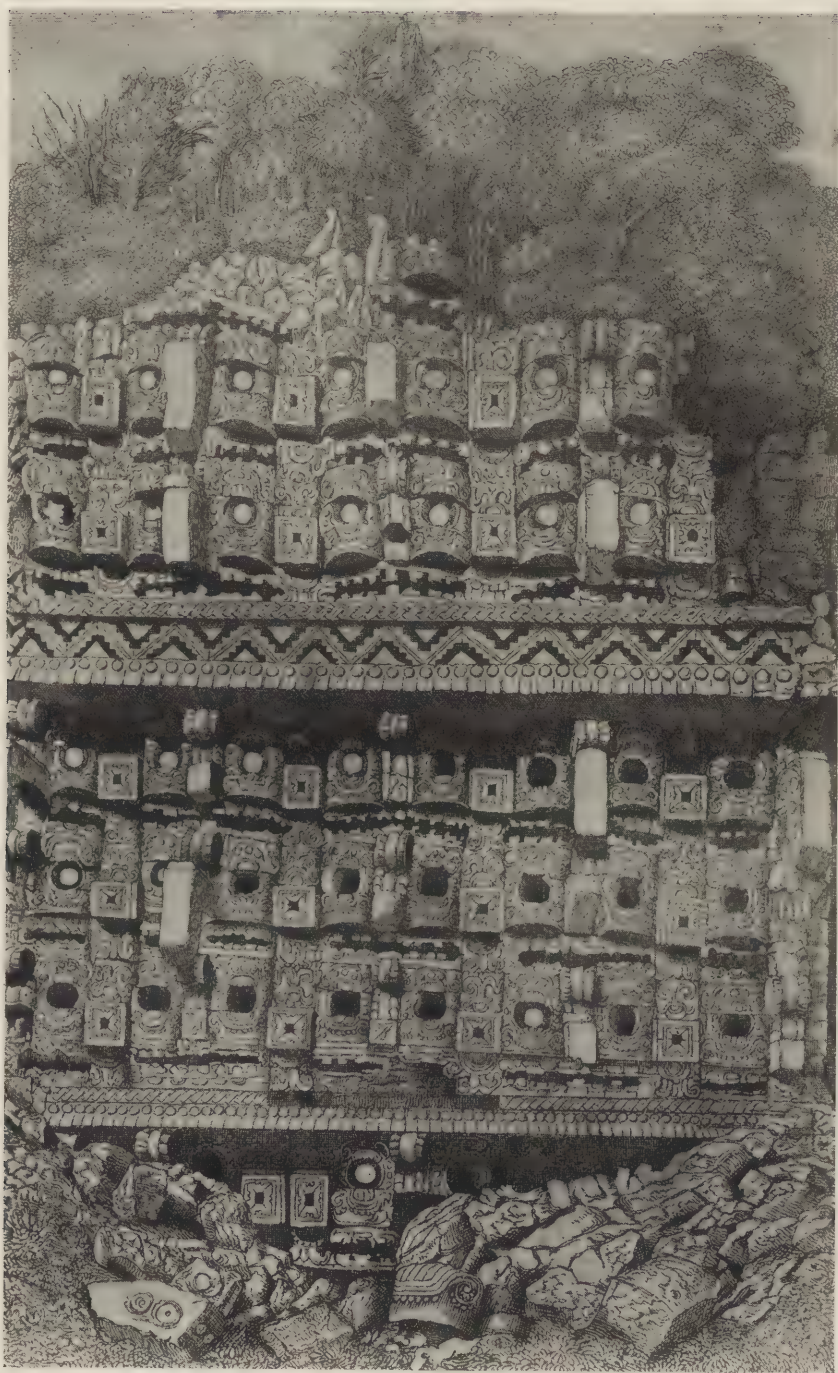
right stakes, they formed sun and wind guards. Wrought with greater care and placed with greater forethought, they became huts, cabins, encircling fences to baffle wild beasts and keep tame animals at home. These we find in Africa to-day. So, from these humble beginnings of woven work, reinforced with wood and clay to make the texture strong against wind and rain, rose the structures we dignify by the name of architecture—just as the priceless, clear-skinned, sonorous vase of porcelain rose from the primitive basketwork of early man. And, even as we can often argue from a bit of rare porcelain, by indications on its surface, whether of shape or color, that an original form woven in basketwork must have once existed, so, in the stateliest products of the builder's art we can often hear an echo of the age when man did not anchor his house in the soil, but wove his abode about him like a caterpillar or an oriole, and like them was content to build for the season only.

The highest development to which the redmen of America attained in architecture is found in Southern Mexico, Guatemala, Peru. Examine the pictures of temples and communal houses, of palaces and assembly halls brought to Europe and North America by Stephens and Catherwood, by Charnay, Maudsley,



Rock-cut tomb, or Cenotaph at Doganulu, Asia Minor, carved after a rug, with decorated borders, the original design being simple geometric arabesques.

(Illustration from Texier, *"Asia Mineure."*)



A PORTION OF THE RUINS OF KABAH, YUCATAN.

A combination of designs carved in stone from wooden and matting originals. Distinct textile character in horizontal bands.

(Illustrated from Stephens' *"Incidents of Travel in Yucatan."*)



INTERIOR OF AN EGYPTIAN TOMB, IN WHICH THE CHARACTER OF THE CEILING AND WALL DECORATIONS BESPEAK A DISTINCT TEXTILE ORIGIN.

Mahler and others and see if this is not an architecture in which stone has been used to make durable a style of building founded on woven-work supported by wooden posts and cross-beams. At Uxmal the so-called House of the Nuns shows on the corners a most elaborate

mass of stone carvings representing one monstrous mask above the other; this portion represents wood copied in stone. The walls between have curious decorative lattice-work in stone which simulates woven basketry. In the same place a building repeats feather decorations,



PYLON OF RAMESES II, KARNAK, EGYPT.

A monument which shows reproduction in stone of textile work.

on a roof, a true feather thatch with birds carved here and there. It recalls the use of screens covered with feathers, and of cloaks and walls, or rather hangings for the less durable habitations made up of the feather-work in which these Indians were skilled. At a place called Sabatsché a small house built of stone was seen and pictured by Catherwood. This two-story building is decorated as to its upper half with upright panels of plaited work imitated in the stone. At Chichen Itza, favorite decorations consist of continuous bands of twisted ribbon-like interlacings which are only explainable as derived from basketwork. Upper structures are common, wherein straight courses or bands appear exactly as they would be placed in plaited work, in order to stiffen and hold upright the sides of a basket. Amazing as are the carvings of masks, faces, monsters, serpents, etc., objects undoubtedly studied first in wood; yet hardly less extraordinary are the portions in these buildings that testify to an uncommon skill and originality in woven

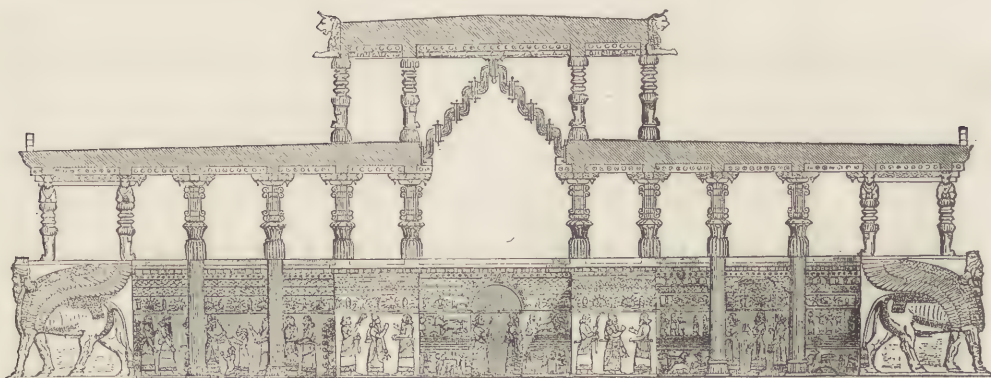
work among the tribes which reared them. With regard to the great monoliths carved on all sides, they may have had for prototypes tall osier structures decorated with masks and feather-work.

At Mitla in Central Mexico in a relic of the Zapotec nation, evidences abound that woven work, perhaps like the blankets of our Western Indians, decorated with elaborate designs in colors, was copied in imperishable stone on the skilfully laid walls. The interior of a room at Mitla is completely covered with most varied and stately designs. Such a room represents a four-sided tent or lodge hung with colored hangings. The exterior offers the same peculiarity; but the simulated woven work lies in long flat panels very beautifully arranged. What remains of the wall paintings on flat surfaces at Mitla suggests forcibly the most gorgeous carpets, the borders having a continuous pattern repeating



Persepolis—The Propylaea of Xerxes, restored by Chipiez, shows a veneer of variegated bricks having large rug patterns.

(Illustration from "History of Art in Persia.")



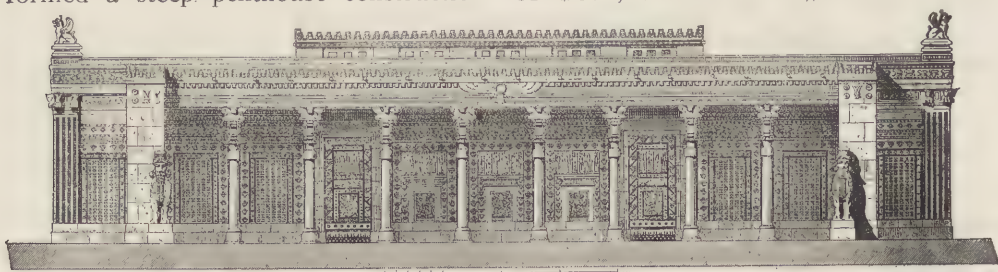
Section of principal rooms, ruins of Assyrian Palace at Khorsabad. The friezes and panels represent textile motives turned into carved and painted stone.
(Illustration from Ferguson's "History of Architecture.")

the same group of signs, the fields covered with conventionalized gods, birds, monsters, etc., all very splendid and full of the grand style. It is the work of the primitive loom repeated in colored designs upon the walls.

Although the old and highly skilled Mayas, Zapotecs, Nahuatl and Incas began at remote epochs to build in stone, they could not get so far away from thatch and woven-work supported by wooden posts and beams as to use stone for its own sake, taking advantage of its qualities. But this is hardly surprising, for we note that Asian races on far higher levels of cultivation were in the same box. Vaulted construction in Yucatan never got beyond a faithful imitation in stone of a lodge or tent, in which the ridgepole is raised high above the level of the walls, and roof and walls are copies of the matting which was placed athwart the ridgepole and thus formed a steep penthouse construction

fit to shed the heavy rains of a semi-tropical climate. Often this construction is overlaid outside; but then it reveals itself when one examines the inside of the stone chambers.

One Asian race seems to have had the inspiration which produced the arch (the vault construction of the Eskimos for the moment waived). One race laid brick and dressed stone in such an artful way in subterranean passages that the true arch was attained. This was the Chaldean or Sumir-Accad folk about the confluence of Tigris and Euphrates. Thence the buried arch spread to Egypt and Etruria, reaching Rome under Etruscan architects when the Cloaca Maxima was built. But at her most artistic epoch Greece never accepted it; and it was a long while before men in Asia Minor and Italy dared to use it above ground. Then indeed it carried architecture away from the old traditions of wood, wattle and textile forms and



PERSEPOLIS.—"THE HOUSE OF 100 COLUMNS, RESTORATION OF FACADE BY PERROT AND CHAPIEZ.

Following precedents they have restored the fronts, inside and between the columns with effects and designs taken from Persian rugs and hangings.



Trajan's Memorial Arch, Benevento, Italy, repeats a wooden framework stretched with painted, woven or embroidered cloth—a temporary arch of triumph, done in textiles, developed to a permanent expression in stone.

sent it soaring into the sublimest of the mediæval Romantic. Yet even so, as we shall see, traces of the aboriginal tectonic principles lingered on. Even then, beneath splendid, solid, weighty piles of masonry we detect the wind-blown product of the loom!

It would be hard to guess the antiquity of textile dwellings in Asia and Africa. Columns in Egyptian temples are often plainly derived from masses of gigantic waterplants bound together. The walls by their ornamentation of colored low reliefs betray their descent from hangings decorated with figures of gods, monsters, deified men, beasts and birds. In the still, sun-baked climate of the Nile valley awnings over open chambers were naturally in order. These, of course, were products of the loom, doubtless for the most part decorated with figures to represent sun, moon and stars, and their symbols human or animal, doubtless half-human half-animal. Underfoot were mats and carpets just as decorative, but perhaps not so

brilliant in hue. Here are the early forerunners of the painted ceiling and the floors wrought in colored tesserae, or covered with carpets, of the Romans and Italians of the Renaissance.

In his "early adventures" Sir Henry Layard describes a reed-made guest room among the Moslem folk in Luristan, the old home of the Chaldeans on the lower courses of the Euphrates and Tigris. We may well believe that such houses have been used in hot climates from time immemorial.

"The 'musif' of the sheikh was the most remarkable of similar temporary constructions which I had seen, for its excessive neatness and cleanliness and its size. It was built entirely of rushes, reeds and mats, and was about forty feet long, twenty broad, and fourteen high. The entrances were formed by clusters of long canes fixed in the ground and united at the top so as to form bent and pointed arches. These 'fluted columns' as it were, were about six feet apart, and between them, serving as a kind of screen, were trellises made of reeds, joined by twisted worsted of bright colors worked into fanciful designs.

"Above them were suspended mats, beautifully made and of the finest texture, which could be raised or lowered at pleasure, so as to admit the air or exclude the sun. The floor was covered with fine carpets and matting. Comfortable cushions and bolsters were ranged along the sides of the 'musif' for the guests to recline against. The remarkable elegance of its construction



Mosaic, 6th Century, from Ravenna, Italy.—"The Palace of Theodoric." Shows the tradition from the ancient Orient for hangings in place of walls between columns.

(Illustration from Gerspach: "La Mosaïque.")



Mosaic in apse of S. John Lateran, Rome, 13th century, following early mosaics which represented hangings wrought with figures of saints and sacred symbols, etc.

(Illustration from Gerspach: "La Mosaïque.")

did infinite credit to the taste and skill of its Arab builders who were true architects in the best sense of the word."

If one examines the pylons of Egyptian temples, such as that at Karnak, one perceives from their battering shape, inclining so as to get a wide footing, and from the reminiscent tips of reeds showing on the low attic, that the pylon is a stone copy of the gateway built of reeds and clothed with tapestries decorated from top to bottom with figures of gods and kings. The compartments are divided above and below with bands. A powerful rounded band runs just below the attic. It simulates the largest cable of all those which held the original reed-construction firm. Egyptian wall paintings in general look as if they had woven prototypes, from which the rows of figures were transferred to the hard surface by indenting for outlines and then painting. The very regularity of these bands of figures agrees with loom-work which scarcely admits of a different disposition of the design.

The same story of origins is told by the inner parts of the temple at Karnak. The central round columns suggest bundles of poles or reeds swathed in textile work whose decorations are woven in tiers. If this brilliantly painted surface of a column could be detached and laid out flat on the ground, we would have a carpet much longer than broad with the

zone for the principal figures of gods and conquering monarchs toward the middle. In the bases and the flaring capitals we see the suggestion of palm leaves or broad aquatic plants. What more appropriate, what more natural to the valley of the Nile where flooded lands and dry desert alternate at different seasons?

The origin of the column in a bundle of reeds or poles explains the "entasis" or the tapering of stone columns above and below a point toward the middle. Such a reed bundle, enveloped in cloth, could not be reduced to an exact cylindrical shape. Bound above the base and below the capital it would naturally swell out somewhere between the bands. Now this swelling has been retained by tradition. Where it is omitted the eye may not tell the reason for dissatisfaction, but instinct resents the omission. "He builded better than he knew. . . ."

In the temple at Edfu the entrance to the hypostelê hall recalls Layard's account of the chief's guest room in Luristan. Here the columns are set close together; they are reminiscent of clusters of palm or reed and they are covered with decorations that savor of the loom. At half-height between the columns are screens of stone with ornamental mural paintings reproducing curtains that span the spaces from column to column and hide the interior without stopping light and air. Travelers in Egypt bearing these origins in mind will discover many other points in the ancient architecture which carry the same suggestion.

(To be continued.)



Christian Mosaic, 12th century, Church of S. Francis the Roman, at Rome. Adaptation in mosaic of the Velarium of Roman theatres, shading the audience from the sun.

(Illustration from Gerspach: "La Mosaïque.")



BRENTMOOR PARK, ST. LOUIS, MO., LOOKING ACROSS LOT 3.

CO-OPERATIVE GROUP PLANNING

▼ A SUBURBAN DEVELOPMENT ▼

HENRY WRIGHT, ARCHITECT & LANDSCAPE ARCHITECT



HERE has during the past decade been no movement of more nation-wide significance to both the architect and the home builder than that presented by the development of suburban property and the tendency on the part of those seeking attractive home conditions to get away from

the restrictions and monotony of the city street and go far into the country for those surroundings which make for comfort and pleasure. In this way the architect has found himself confronted by many new problems bearing especially upon the arrangement of the architectural design with reference to outlook, grades and other matters not previously encountered in his work. He frequently meets with many difficult, and sometimes annoying, conditions in solving the prob-

lems of approach, relation of his property to its surroundings, subservience of the service portion of his building group, and many other questions of similar character.

While we see many excellent individual examples of country home design, there are but a few places in which much consideration has been given the interrelation of a number of buildings, while there are many instances in which very excellent designs have suffered much from incongruous surroundings.

It is with the hope of suggesting some basic principles for the more rational treatment of these matters that a most interesting study has been made by Henry Wright, Landscape Architect, of St. Louis, in his treatment of a new residential subdivision known as Brentmoor Park.

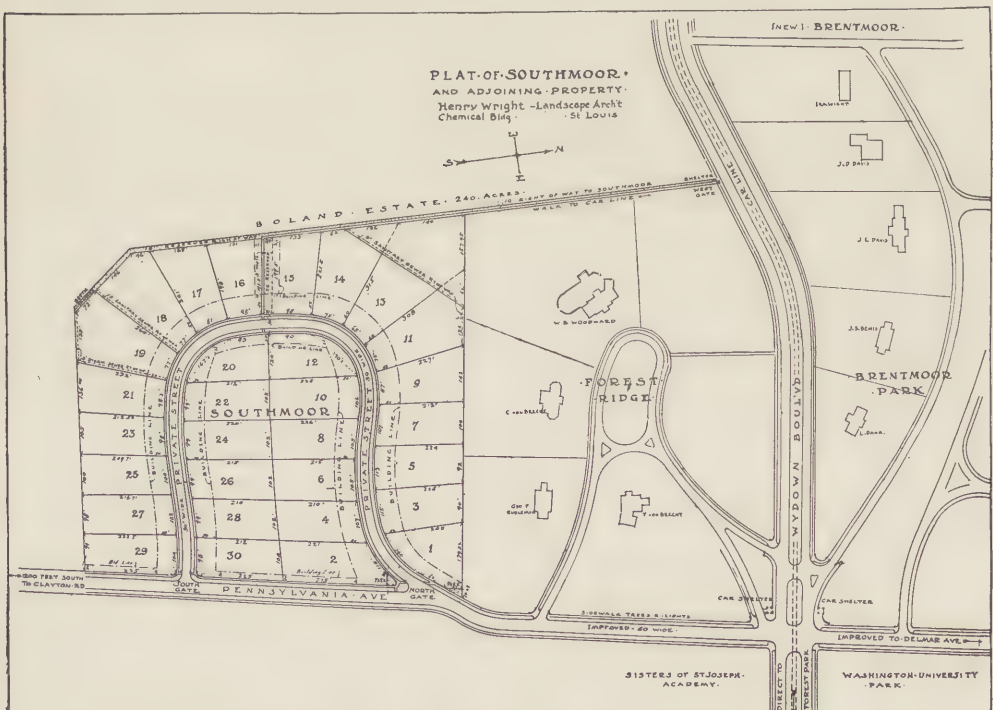
Some four years ago, a group of gentlemen in St. Louis, seeking a permanently attractive location for the purpose of building suburban homes, pur-

chased a tract of land (Brentmoor Park) lying in the logical direction of the best residence development and gave to the landscape architect the problem of subdividing this property into fifteen tracts, all of which should have desirable building sites and which should as a whole present the greatest possible degree of beauty and community advantages. The property, containing about 35 acres, was marked by a distinct draw, or valley, extending into it from the corner which would form the logical main approach from the city. This valley was retained, with such of its natural beauty as could be preserved, and forms a private park around which, as far as possible, the home sites have been placed. The individual lots contained from one and one-half to two acres. Careful restrictions as to building site and the arrangement of the improvements thereon were worked out and have been to a considerable degree successful, in spite of the fact that many unforeseen diffi-

culties and desirable alterations have presented themselves, and are being taken into account in connection with new properties of similar character.

All of the lots are accessible from the interior driveway system, as well as from exterior service roads, and deliveries of merchandise are confined entirely to the latter. All wires are placed in conduit; and in many other ways advantages have been secured which could not have been in the case of a person developing a single property for his individual use.

For the purpose of comparing results with the original scheme of subdivision, there are superimposed upon the plat of the property the private improvements which have been added during the last three years. Nine residences have been designed by various architects, together with grounds improvements which have been carried out either in accordance with the ideas of the architect, or, with the collaboration of a landscape architect or gardener. We will cite these briefly,



PLAN SHOWING THE LAYOUT OF "SOUTHMOOR" SUBURBAN DEVELOPMENT, ADJACENT TO FOREST RIDGE—"BRENTMOOR PARK," THE ORIGINAL DEVELOPMENT. APPEARS AT THE RIGHT.

Henry Wright, Landscape Architect.



A GROUP SHOWING SEVERAL OF THE
HOUSES IN BRENTMOOR PARK.

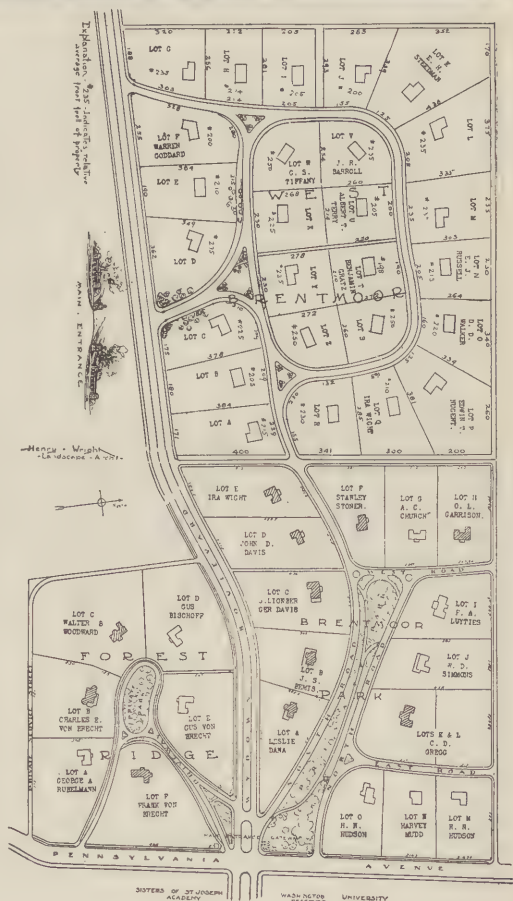
Henry Wright, Landscape Architect.

using the numbers of the lots shown on the plat for reference, and it is to be understood that both the photographs and the comments have been made with the intention of illustrating the subject of this article, rather than bringing out the many interesting points presented in the architecture itself.

It is the intention here more especially to bring out the value of group planning and placing of residences in the proper relation one to another, rather than to give detailed attention to any one of the buildings. Throughout the country there are countless examples of individual country homes and estates which, taken individually, present great interest and merit, but there is rarely evidenced any expression of co-operation on the part of owners in the relations of adjoining properties.

In three subdivisions near St. Louis the improvements, all of which have been accomplished within the last four years, have aggregated, in cost, about one and one-quarter million dollars, and have not been promoted in the usual manner by real estate dealers, but through a desire on the part of certain groups of individuals to secure the best conditions under which to build their own homes.

In Brentmoor Park, the first of these properties, there were ten shareholders and five lots sold to outsiders; in Forest



PLAN OF ADJACENT PROPERTIES, BRENT-
MOOR PARK, WEST BRENTMOOR, AND
FOREST RIDGE, ST. LOUIS, MO.

Henry Wright, Landscape Architect.



RESIDENCE OF LESLIE DANA, ESQ., BRENTMOOR PARK, ST. LOUIS, MO. (LOT 1.)
Klipstein & Rathmann, Architects.

Ridge there were no lots for sale, and in West Brentmoor the proportion is about half and half.

The following notes on the illustrations will serve to bring out the points which Mr. Wright has striven for in his development studies, which cannot fail to interest architects, owners and real estate operators equally:

Lot No. 1 presented unusual difficulties, as well as advantages, by reason of the peculiar shape of the lot and its very considerable elevation above the interior driveway. An interesting and successful house has been built from the designs of Messrs. Klipstein and Rathmann, for Mr. Leslie Dana, which includes a garage built in direct connection with the house, thus eliminating any outbuildings which otherwise must have been placed in the foreground to the disadvantage of the appearance not only of this property, but the place as a whole.

On Lot No. 2, the house owned by Mr. J. S. Bemis, was designed, together with the grounds improvements, by Henry Wright, Landscape Architect, the

garage having been so placed as to lengthen the front presented to the road—with the special idea that this house was to be rather smaller than others within the property and needed this additional advantage of apparent size. The kitchen yard and service drive have all been inclosed by walls to the west of the flower garden, which opens off the living rooms in the rear of the house. Both driveway and walk approaches to the house lead to steps which rise to a brick paved terrace flanked by a stone balustrade.

No. 3. The residence of Mr. J. L. Davis, Messrs. Cope and Stewardson, Architects, Henry Wright collaborating on grounds work, presented special difficulties in grade lines, the successful solution of which can be judged from photograph showing this and the adjoining house of Mr. J. D. Davis—the latter designed by Mr. James P. Jamieson. The two properties have a joint garage, together with driveways and gardening so arranged as to preserve the best views and appearance of both properties.

Nos. 5 and 6 have been carried out



T. C. = Tennis Court.
F. G. = Flower Garden.
K. Y. = Kitchen Yard.

THE SUBDIVISION OF BRENTMOOR PARK, ST. LOUIS, MO.
HENRY WRIGHT, LANDSCAPE ARCHITECT.



RESIDENCE OF LESLIE DANA, ESQ. (LOT 1 TO THE LEFT.) RESIDENCE OF J. S. BEMIS, ESQ., BRENTMOOR PARK, ST. LOUIS, MO. (LOT 2 TO THE RIGHT.)

Henry Wright, Architect and Landscape Architect.

under the plans for both house and grounds, of Mr. Howard Shaw, Architect; the latter, for Mr. Stanley Stoner, was illustrated in detail in the Architectural Record for April, 1913.

House on Nos. 11 and 12, for Mr. C.

D. Gregg, also designed by Mr. Shaw, is—as in the case of Mr. Stoner's place—marked by the adoption of the English fore-court plan of entrance, as well as attractive garden and terrace features.

On Lot 8, attractive home has been



RESIDENCE OF J. L. DAVIS, ESQ., BRENTMOOR PARK, ST. LOUIS, MO. (LOT 3.)

Cope and Stewardson, Architects.



RESIDENCE OF C. D. GREGG, ESQ., BRENTMOOR PARK, ST. LOUIS, MO. (LOTS 11 & 12.)
Howard Shaw, Architect.

designed for Mr. O. L. Garrison, by Messrs. Roth and Study, which appears in view No. 7.

On No. 9, designs have just been prepared for a home for Mr. F. A. Luyties—by Mr. James P. Jamieson, Henry Wright collaborating in grounds work, and attention is especially called to the consideration given the surrounding properties, although not detracting in any way from the individual use of the property. In laying out the fifteen lots it was not feasible to face all of the properties upon the private park, and Lots 7 and 8 necessarily faced on the side of Lot 9. Mr. Jamieson's design places the kitchen wing to the northeast of the house and the main driveway entrance to the north in such a way as to make the main lawn, as well as the approach to the house, immediately in front of Lot 8, while toward the actual front of the lot the living rooms have been placed to the south and look out upon an extensive garden terrace which is not approached in any way from the road. A path leads along the eastern boundary of the lot, from the service wing, reaching the steps which lead down into the private park and terrace and thence to the car.

In each of the designs, questions have

arisen relative to the interrelation with the other lots, especially in placing the service yard, which have been handled with the greatest degree of mutual good will.

The matter of just how the architect and landscape architect may work to the best mutual advantage has been one which has commanded attention throughout the development. Mr. Wright's training having been fortunately divided between a technical architectural education and practice covering a number of years, and later an almost equal period in connection with some of the best and most extensive landscape work, he has given special thought to this subject. It would seem a logical conclusion that the architect as a general rule, being interested primarily in his architectural design, and the many practical, as well as aesthetic problems arising in connection therewith, should not be burdened with the necessity of an additional experience in handling the problems of the setting for his building, fixing of grades, etc., whereas a landscape architect of thorough training in these matters—if appreciating (even to a limited extent) the architectural necessities of the problem—could offer an assistance in coöperation



A specially difficult grade problem. The rear is entered by going up five steps to reach basement floor. This house was studied on a topographical model of the land.

RESIDENCE OF FRANK VAN BRECHT,
ESQ. HENRY WRIGHT AND M. P.
McARDLE, ASSOCIATE ARCHITECTS.

with the architect of value both to the architect and his client, and could relieve the former of a large amount of exterior detail in connection with grading, driveways and other matters. It certainly seems possible that work can be carried on, as it has been in these interesting St. Louis developments, in such a way as not to detract from the professional prestige of either the architect or the landscape architect. It is quite possible that the latter need not personally conduct the work usually attributed to the landscape gardener, but may provide for the details of such work through

a gardener contractor, just as the architect would depend upon a heating engineer for the practical details of that portion of his design.

It would seem that an important field is thus opened for what may be considered a branch of the architectural profession which shall combine a specific training in engineering and planting combined with a knowledge of the fundamental principles of architecture. And a professional recognition of this should go far toward harmonizing and unifying the architectural aspect of many of our residential suburbs.



RESIDENCE OF WALTER B. WOODWARD, ESQ., FOREST RIDGE, MO.
Henry Wright, Architect and Landscape Architect.

This is the southwest exposure commanding a broad view over own and neighboring territory. The angle encloses the best summer breezes. Servants have a wing to themselves as shown on the angle. The terrace garden takes up the considerable difference in grade between front and back of house. Except immediately around house original grade has been untouched.



It is the purpose of this department to keep the readers of the "Architectural Record" in touch with current publications dealing with architecture and the allied arts, describing not only literary, but practical values.

The "Country Life" Book of Cottages.
By Lawrence Weaver.

This is a book of real cottages, built at a cost suitable for cottages, and not a book of expensive villas inappropriately masquerading under the name of cottages. At the very outset, emphasis is laid on the fact that throughout the book the word "cottage" retains its plain meaning, "a dwelling house of small size and humble character." Nothing is included that might have applied to it Coleridge's

caustic appellation, "the 'cottage of gentility' with its double coach-house."

From cover to cover the book is eminently practical. There is nothing visionary about it. It is a presentation of actual achievements and a record of the cold, hard facts pertaining thereto. So bristling are its pages with facts and figures, indeed, that anyone expecting to be diverted and entertained by Mr. Weaver's wonted vein of pleasant description, mingled with lucid criticism, will be somewhat disappointed. The volume is straightly confined to the most matter-of-fact details. For that very reason, however, it will be found particularly valuable both to architects and those

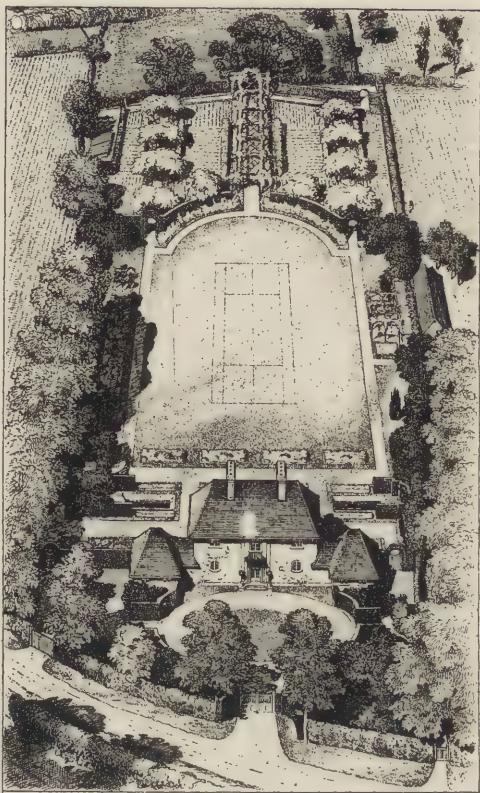


AN ILLUSTRATION FROM "THE BOOK OF COUNTRY COTTAGES," BY LAWRENCE WEAVER.

who contemplate building, whether for speculative purposes or personal occupancy. Due attention is paid financial as well as architectural considerations, always keeping the prosaic but necessary "bread and butter" aspect of the question well to the fore.

Mr. Weaver plainly states, in his introductory chapter, that the aim of the book is to set out the problems attending cottage building and "some of the conditions imposed by varying limits of cost, and to show how various architects have succeeded in providing convenient and successful cottages at reasonable costs." The task he proposes to himself he performs most conscientiously. The second chapter, contributed by F. E. Green, on "The problem of Providing Cottages for Laborers," while not of strictly architectural significance, contains a discussion of local economic conditions that sets forth the crying need of more and better cottages and suggests several that might profitably be considered in connection with housing our own laboring class. Mr. Weaver vigorously combats the pernicious notion, apparently entertained by some builders and owners, that hideous barracks are the only feasible abodes for cottagers from the financial side of the question and that, viewed from other points they are "good enough." *Appropos* of his contention he enunciates two aphorisms with which most thinking people will heartily concur—that "architectural amenity is the outcome of skill rather than of money" and that "cheap cottages do not mean ugly cottages."

From Chapters III to VIII, inclusive, all manner of cottages are considered, from the cheapest at \$750, to those costing about \$3,000. Of course the English prices given are of no value whatever as an exact guide for American estimates, since the costs of labor and materials are totally different on our side of the Atlantic, but they do afford a trustworthy base for deductions anent comparative costs. These cottages are for all sorts and conditions of folkmen and are severally designed for the particular needs of their occupants ranging all the way from day laborers up to gentle folk of slender means. Farm hands, small



AN ILLUSTRATION FROM WEAVER'S "BOOK OF COUNTRY COTTAGES."

holders, estate servants, such as gardeners and chauffeurs, clerks living in the suburbs, "week-enders" at the seaside or in the country and "people of moderate means and refined taste whose home must be built with severe regard to economy," all go to make up a large and varied class of cottage dwellers and all have a right to every consideration that may contribute to the attractiveness of their dwellings.

Quite apart from the individual phase of the subject, there is a normal obligation resting upon every architect with a conscience—and this obligation Mr. Weaver notes—to do all within his power to preserve the beauty of the countryside by the erection of proper buildings and avert desecration by ugly little box-like structures that force one to utter in disgust the plaint that "every [other] prospect pleases and only man is vile." Since the number of cottage dwellers is so



AN ILLUSTRATION FROM "THE BOOK OF COTTAGES," BY LAWRENCE WEAVER.

There is always considerable interesting quality in the technique of drafting in English architectural designs, quite aside from the interest of the design itself.

large and since cottages and small houses must necessarily so far outnumber the houses of greater size and pretense in any community it is by the same token, inevitable that the cottage and small house must determine the architectural complexion of suburban and rural districts. The small house and cottage question, therefore, is one of paramount interest and importance and in some instances is giving acute cause for concern. To this field the "Book of Cottages" brings timely and helpful suggestions and is, naturally, a most welcome contribution to the literature of the subject.

In the chapter on Gate Lodges, the author dwells on the opportunity opened to the designer of investing "a little building with a marked architectural character which would be inappropriate and, indeed, pretentious in a cottage built for ordinary purposes." In many instances the treatment of lodges in America might be much improved and what Mr. Weaver has to say on the subject is well worth reading. The three last chapters on "The Repairing of Old Cottages," "The Grouping of Cottages" and "Village Planning" are replete with good advice and rich in common-sense suggestions.

The "Book of Cottages" is very largely a book of picture and plans, but the author has wisely refrained from giving such detailed information that it can be used in lieu of other drawings for actual construction work. The examples chosen for illustration are from the designs of some of the foremost British architects and, as might be expected, are highly interesting. Mr. Weaver's presentation of his subject is vigorously helpful and constructive and many of the ideas discussed are readily susceptible of adaptation to American conditions and requirements with great profit. It goes without saying that the "Book of Cottages" deserves a place on the library shelves of all architects who have to deal with this vital and pressing phase of our domestic development.

H. DONALDSON EBERLEIN.



Memorial to Bulfinch.

On August 8th, the 150th anniversary of the birth of Charles Bulfinch the Boston Society of Architects placed a wreath of laurel, with suitable inscription, on the landing between the gate-posts in front of the State House in Boston, this being the most notable Bulfinch building. It is proposed by the Society to make the memorial permanent by later sinking in the pavement a wreath in bronze or brass. The influence of Bulfinch upon the architecture of Boston was very great. For in addition to the work which he himself did, and which exerted a marked influence upon his town, he was, for twenty-one years, chairman of the Board of Selectmen—a prototype of the better class of modern architects in his interest in public affairs.

Possibilities of Expression.

In a note which is drifting about, some writer, who takes as his text Herbert Spencer's dictum that "all progress is differentiation," suggests that the architects have been slow to improve their opportunities. He seems to forget that houses, and barns, and churches, and factories, and emporiums of retail trade, and office buildings, are not alike, and do represent a great deal of differentiation. It is interesting indeed to compare the multiplicity of architectural forms which we have to-day, with the paucity of types in earlier civilizations. The thought of the writer, however, is that architects have, as yet, failed to express adequately the grouping of trades and professions. It is quite true that, except for the studio building, the office structure which is given up to

lawyers may be precisely like the office structure which is occupied by bankers and brokers, or by architects, or by real estate firms. But what would he have? How horrible a possibility is suggested by a too literal expression! Would he have a skyscraper on Maiden Lane take the form of a tiara, or would he have the office building largely devoted to dentists rising into the sky in the form of an eye-tooth? Must the structure in which are gathered steamship offices have windows in the shape of port-holes, and the newspaper building be a splurge of advertisements and headlines?

Arraignment of the Garden City.

A severe and very thoughtful attack on the garden city conception is the burden of an article in "The Town Planning Review." In such location, almost dramatic interest attaches to it, so completely identified with the garden city and suburb movement is English town planning of which this Review is an organ. The daring writer is A. T. Edwards. He starts out by reminding the garden city advocates, whose propaganda is a protest against towns, that large cities have long been, "and will continue to be, counted as high achievements." He says, "your notion that you have nothing to learn from the formal treatment you are pleased to call monotonous and upon which incomparable genius has been expended is not a little presumptuous. * * * Moreover, an arrangement of buildings in the closest mutual association has not failed to meet the most urgent needs of mankind. It has formed an environment in which commerce has been served, learning has flourished, and the amenities of social life has been secured. In towns we find the crowded streets, contiguous dwellings packed together, the

stately square, the long facade. Society will not readily abandon these." Continuing, the writer expresses the opinion that the garden city and suburb method of living, "in sparsely scattered homes, is profoundly unnatural. There is no need for every house to be isolated as if the whole world were a fever hospital." He reminds his readers of Aristotle's remark that man is a social animal, and he says that, however deplorable, it is never-the-less true, "that the working man is quite content to be in a row of houses, to stand outside his door and talk to his neighbors and to see other neighbors on the opposite side of the street. All he asks for is better houses, and a better street." The garden city, however, would give us "neither the crowded interest of the town nor the quiet charm of the country. It gives us the advantages neither of solitude nor of society. And the great inconvenience of this manner of living must also be noticed. The working man does not want to traverse long distances to see his friends after his day's work is done. Some of these suburbs are so big that trams are needed for the inhabitants, but cannot be employed without sacrificing the rustic aspect which is so much desired. As people of very limited means have not got private carriages and motor-cars, they should not have their dwellings scattered far from each other."

Coming to particulars, the bold writer expresses the opinion that the sort of house the poor man wants is not a pretty cottage but one which will give him the maximum accommodation for the money he spends. He should not have to skimp on his food in order to pay for picturesque gables. Though dormer windows may be picturesque they may let little light and air into upstairs bed-rooms, and what does it profit a man to have abundance of air outside if his romantic architect forbids him to breathe it in his bed-room?

Mr. Edwards suggests that if garden city planners seek economy, they give a trial to streets. "It will not be a leap in the dark. They have been tried before. Streets are roads with continuous houses on either side, and need not be in the least degree dull. It is possible to express intellect and spirit in their design without indulging in expensive ornament. And there is so much less cost for water, drainage, and gas * * * There are two classical ways in which a plurality of houses can be treated, and neither of them has been adopted in garden suburbs. In the first case, the houses are kept separate but face upon a road. Simple

rectangular forms predominate, and horizontal lines and flat roofs are common. The other method is to have streets of continuous houses, in which case the unity can be of a much higher order."

Mr. Edwards' final shot is this: "Slums grew up in the towns, therefore the towns are to be condemned. This impatient attitude expresses a tiredness of spirit and a lack of historic sense."

Vanishing New York

In a recent number of the Architectural Record it was announced that the fine old building at Number Seven State Street was soon to be numbered among the all too many vanishing landmarks of New York City.

Since then word has been received that this house is to be spared, for a few years at least, as the property on which it stands was not included in the purchase that has, however, caused the destruction of three other most important Colonial buildings, numbers One, Two and Three State Street, which were torn down during the latter part of September.

To those who know well the historic sites of New York the destruction of these houses—and especially of number One—will be a loss that will be hard to forget. Number One was one of the finest and most important of the Colonial houses in the City, and it was the house in which Robert Fulton lived during the latter triumphant days of his life and where, according to his friend and biographer Cadwallader Colden, he died.

Besides this, it had an interesting architectural story, as well as an historical one. Visitors in New Amsterdam before 1665 could have seen on the site of this building a deserted cabin, probably built of logs gathered near its site, one-story high and anything but beautiful even to those who were used to the "architecture" of the little village of "Nu Iarck" at that time. This was the property of one Thomas Baxter, an Englishman who, falling into trouble with the Dutch authorities, had abandoned his possessions and taken refuge in New England. His house seems to have stood on an unusually good foundation for after the property had been confiscated and was finally torn down to make way for some improvements in Governor Stuyvesant's garden, its foundations seem to have been preserved, and it was on a part of them that the building which was torn down was finally built.



NO. 1 STATE STREET, NEW YORK CITY. A VANISHING LANDMARK.

From the pen sketch by Rawson W. Haddon.

Just when this latter building was erected does not seem clear, but views of New York made before the Revolution show that it stood before 1776 and before the other houses on the block were built. In 1790 it was occupied by a John Coles who was one of the most famous of the old merchant princes of New York. He lived there from that time, with the exception of the few years when it was occupied by Fulton, until his death in 1826. After that it was occupied by one of his sons until 1834, at which time the old house was given up for a newer one on Bond Street, which was just then becoming a fashionable place of residence.

This house, for some reason or other, escaped the disastrous re-decoration that spoiled its neighbors and so many of the other New York houses at the time when "stock" decoration was just beginning to

come into use, in the early part of the last century, and in it were many Colonial fire-places, doorways, etc., in excellent condition and absolutely untouched.

At the present time there are many societies in the United States that are doing excellent work for the preservation of Colonial landmarks, but the fact that the destruction of so important a building as Number One State Street is allowed in New York without so much as a word of protest, and that no record of it is to be kept in the way of drawings or photographs shows the importance and necessity of some immediate action on the part of the architectural societies of America towards arousing an interest in the preservation of our all too few remaining monuments, architectural and historical.

R. W. H.

**"Better
Estimating."**

Mr. G. Alexander Wright, known as the author of "Wright on Quantities" and "Wright on Building Arbitration" is again heard from, and on the vital question of "Better Estimating."

Mr. Wright, in stating the purposes of an "American Institute of Quantity Surveyors," cordially invites all subscribers of "The Architectural Record" who are interested in the subject to communicate with him direct (571 California St., San Francisco, Cal.). The Quantity System of Estimating will, says Mr. Wright, when universally established, do more than has ever been done to harmonize the interests of the Architect, Engineer, Contractor and Owner.

The following outline is presented by Mr. Wright as his idea for the national organization and co-operation, on an efficiency basis, of all who are interested in better estimating:

Since the publication of my recent address in favor of "Better Estimating Methods" I have received scores of letters from architects in all parts of the country, many kindly offering their help and encouragement. To all of these gentlemen I send this communication. My efforts in aid of the above, commenced originally with an address before our Builders' Exchange in the year 1891 and our local Chapter of the American Institute of Architects, later in that year. I followed this by individual missionary work. Then there appeared in the American Architect in 1897 and 1898, and other journals, articles from me advocating the Quantity System. Since that time I have continued this work, consistently I hope, and effectively I believe, until for the past year or two the demand for "better estimating methods" has become a popular theme throughout the country.

I recognize the great advantage in a broad movement of this nature, of friendly co-operation, and the necessity for the early organization of an "American Institute of Quantity Surveyors" with councils or committees in all large cities. One is now being formed in San Francisco with the following objects, viz.:

First: To promote by legitimate means a better method of estimating, and of inviting and receiving bids.

Second: To establish local councils or committees in all large cities to further these objects.

Third: All persons, architects, engineers,

contractors or owners who approve of the above objects are eligible as "associate" members.

Fourth: Regular members to consist of qualified quantity surveyors to whom a certificate to practice has been issued by this society, under its rules. (No regular members to be elected at present.)

The matter of constitution and by-laws are under consideration and copies will be sent for the information and guidance of each council in process of organizing.

It is suggested that each local council may vary the suggested by-laws to suit its own local conditions. That the annual dues for associate members be \$2 plus \$1 for the official monthly publication (now being arranged for) dealing with the quantity question and devoted to an exchange of views between members upon this and kindred subjects.

Owing to different conditions prevailing between the extreme east and the extreme west, the present thought is to divide the United States into two districts, Eastern and Western, the headquarters of each to be located in a city to be selected after a sufficient number of local councils have been organized. The chairman of each council to be the representative upon the managing board of directors, and which will form the principal examining body.

When a sufficient number of councils are formed, I hope to do myself the pleasure of visiting each one, and to then give any desired information, or offer any suggestions that may seem appropriate.

I hope you will feel sufficiently interested to call a few of your personal friends or business acquaintances together and now organize a local council of the A. I. Q. S. in your city, and inform me of your progress. If you only get five or six to begin with, and appoint a chairman, secretary and working committee it will be sufficient. The principal duty of your council will be to advocate the objects stated herein and to get other suitable persons to come in as associate members to assist in the work. All the information you desire will be sent to you gladly.

Viewed in a broad way, this movement is of deep interest to the architect, engineer and owner (as much probably as it is to the contractor). The effect the Quantity System has is an elevating one, beneficial to our best ideals, and conducive in every way to better and more honest work, and will be a great factor in improving the business relations between owners, architects, engineers and contractors.

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IN THE GARDEN OF RESIDENCE OF MRS.
GEORGE W. FULFORD, SAN DIEGO, CALI-
FORNIA. IRVING J. GILL, ARCHITECT.

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NUMBER VI



THE COUNTRY HOUSE IN CALIFORNIA

By HERBERT D. CROLY

Photographs by George R. King.
(Except pages 507, 508, 513.)



THE country house in California is a young and tender plant, which, like many another American architectural sprig, is full of life and promise. The soil is rich, the air is kindly, and the need is great. But the prospect of its future is clouded by the fact that it has as yet no sufficiently salient tendency to grow in one fruitful direction. Its energy is partly dissipated by the divided counsels which determine its growth, and Californians will do well to bear in mind that they have less excuse for miscellaneous experiments in the kind of country house they build than have their fellow countrymen in the East. So far as the East is concerned one could

hardly give good reasons for asserting that a man ought to build any one kind of country house, because so much would depend upon the neighborhood in which he had happened to buy his land. The bare, cold New England hill pastures call for a building differing essentially from the house which one would like to see erected on the flat sandy plains of Long Island, or in the folds of the rich highly-cultivated, and deeply wooded landscape in the neighborhood of Philadelphia. Moreover in the East and in the middle West, there is at the present time no one style of country house, for which peculiar authority can be rightfully claimed. Californians, on the other hand, have inherited and have partly accepted such a style—a style which has some authority because it is both local and appropriate; and its peculiar propriety consists first in the



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HUNT AND EAGER, ARCHITECTS.
PERGOLA DESIGNED BY D. WILBUR COOK.



RESIDENCE OF E. A. BATCHELDER, ESQ., PASADENA, CAL.
E. A. Batchelder, Architect.

fact of its adaptability to the Californian country side. The country in California with all its variety, possesses in its arable parts certain admirable and uniform characteristics which invite the building of a particular sort of house; and inasmuch as this sort of house has already been built to a certain extent upon local soil, Californians are in the fortunate position of having good reasons for remaining faithful to a simple and comparatively familiar style of domestic architecture.

It will, I am afraid, immediately occur to some of my readers that the style to which I refer is that of the Missions; but such is not the case. The Mission architecture was ecclesiastical rather than domestic; and the attempts which have hitherto been made to adopt the peculiarities of the Mission style to the design of contemporary American houses have been almost wholly grievous in their effects. The Missions contained in their architecture much that was

rudimentary, awkward and ununiformed.

If one wishes to disengage the valuable remnant in Mission architecture, one should go back to the originals from which they were derived, for the local variations which the Friars made upon these originals were due almost entirely to ignorance, and the necessary lack of proper tools, materials and mechanism. The one respect in which the Mission buildings may in the end have a useful formative effect upon the design of Californian country houses lies in the fact that it did stamp the Spanish tradition upon Californian architecture; and the Spanish tradition is only, it must be remembered, a picturesque version of what may in general be described as the Latin or Italian tradition. But this Spanish tradition has left traces of its former sway in California, which are much more useful to the modern American house-builder than are the Missions, viz., the old adobe dwellings; and it is



THE PRATT RESIDENCE, NORDHOFF, CAL.
Greene and Greene, Architects.

these dwellings which constitute the most valuable model for a Californian domestic style. These adobe houses, also, are only distant echoes of the highly and carefully wrought Spanish and Italian buildings from which they were derived; but even when erected in a primitive land and under rude economic conditions, they retained something of the high style of their models. They were long, low, restful structures with salient but gently sloping tiled roofs, over-hanging eaves, enclosed porches or piazzas, and bare stretches of plastered walls. Rudimentary as these buildings were and simple to the verge of attenuation, they attain both by what they avoid and by what they achieve, the essentials of good domestic architecture. They dispensed with the mere mannerisms of the Mission buildings, and announced their allegiance to the admirable sources from which they were derived by their acceptable proportions, their strong lines and shadows, and their sharp emphasis of those parts of the building which most deserved it. All low buildings are necessarily and prop-

erly matters chiefly of a roof; and the roof was the feature, which was not only a little spectacular, but which by virtue of its color, ventured also, to be a little gay.

Such was the kind of house in which the native Californian lived at the time of the American conquest; and if the style it represents should come to have more influence over the houses built by modern Californians, our contemporaries would after all only be following the example of the pioneers. When immigrants from the East and the South began to take up the farming land and to build houses of their own, they fortunately copied some of the peculiarities of the adobe house. Of course they substituted wood for plaster; and of course they always insisted on the piazzas to which they were accustomed; but they retained the low lines, the restful effect and the salient roof of the native Californian house.

The buildings were kept one, or at most, two stories high; and the line of the piazza-roof, if it was not an actual extension of the house-roof, always



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harmonized with the lines of the latter. In this way, the piazza instead of being a useful excrescence as it used to be on the country houses in the East really helped to complete what modest architecture effect it had. Another excellent characteristic of these older Californian ranch-houses was the comparatively simple and honest manner in which the wood was treated. Built though they were at the time when the jig-saw was throughout the East malevolently distorting the ornamental wood-work of even the cheapest houses, they escaped by their remoteness the range of its influence; and by reason of this same remoteness there was no temptation to turn the carpenter into a cheap substitute for the stonecutter. It so happened that the easiest and most economical way to build happened to make a tolerably pleasing building, and by the same happy chance, even the barns, thrown together as they were in the hastiest, flimsiest way, frequently had a good curve or angle to their big roofs, and a certain symmetry in the arrangement of their fronts. One need not be surprised consequently, to find people of taste occasionally converting these old ranch buildings into eligible country houses, and the enclosed yards with which they

were generally accompanied into semi-formal flower gardens—as has been done in one notable instance in the vicinity of Carmel.

Some years elapsed before many country houses were built in California for pleasure as well as for use. The country house as an architectural type implies a degree of economic maturity and social stability which California, in view of its early history, was naturally slow to obtain; and even when Californians had settled down to the enjoyment of some leisure and of the fruits of their prosperity, there were special reasons why a country house which involved some expense was less necessary to a San Franciscan than to a New Yorker. The climate of San Francisco, while it is pleasanter in some seasons than in others, is always mild, equable and invigorating, so that there was no season in which physical comfort demanded an escape to the country. At the same time when the San Franciscan did desire an escape to the country, he was under no similar compulsion to build a country house. The rainless summer and his proximity to the Sierras made a camp in the mountains the pleasantest and the cheapest way of enjoying country life; and to the majority of Californians



RESIDENCE OF D. R. GAMBLE, ESQ., PASADENA, CAL.
Greene and Greene, Architects.

camping was as familiar as it was enjoyable. Their early life had accustomed them to it, and even when they had a roof over their heads and plenty of money in their pockets, they returned to the open sky and a shake-down at night

without that sense of awkward unfamiliarity which diminishes the pleasure of a camp in the Eastern woods. The truth is that the inhabitants of such a country as California blessed with so rare a climate had no need to make as



WINDOW DETAIL, RESIDENCE OF J. W. McNEILL, ESQ., PASADENA, CAL.
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sharp a distinction between indoors and out as do the residents of land with a wet and rigorous climate.

Californians enjoy their country more naturally and more innocently than do the inhabitants of any other state in the Union; and this attitude of theirs toward country life will undoubtedly have an important effect upon the design of their country houses. For no matter how popular and enjoyable camping might be, the country house was bound to come. Neither the inexpensive freedom of a camp in the mountains, nor the comparative acceptability of city life in the summer could prevent a civilized people from seeking some of the more elaborate and expensive, but no less valuable interests and pleasures of country life—such interests for instance, as the building of big country houses, in the raising of fine stock, the cultivation of flowers, and the enjoyment of rural sports. These are pleasures, which even

a camp in the mountains cannot give; and yet they are pleasures which every intelligent and sympathetic people, possessing leisure and money enough must come to demand and enjoy.

In response to this demand Californians have of late years been building country houses of all sorts and conditions. Comparatively poor people have been taking advantage of the increased accessibility of the outskirts of the larger cities to erect suburban houses in which one can detect at least an aspiration towards the country. People with somewhat more money and leisure are selecting some favored location by the seashore or in the mountains, and these are building shacks or bungalows, in which the aspiration towards the country is more completely realized. And finally in the vicinity of the larger cities the rich are making country places which are intended to afford an opportunity for the most elaborate and expensive pleas-



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ures of country life. Each of these different grades of house has some interesting local traits.

The suburban house, erected in the vicinity of San Francisco and Los Angeles, only too often resembles the

three-story "Queen Anne" cottage erected in the East, which has no virtue, either practical or aesthetic, except that of being cheap; but fortunately there are many of these suburban houses which do not conform to the popular but de-



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praved Eastern type. On the contrary they remind one of the lines and proportions of the ranch houses which I have already described; and in this respect they perpetuate the best available tradition. They tend to be one or two-story buildings, with long, low lines, and with a roof overhanging and dominating the upright members. The piazza, which was so necessary to the farmer in the interior valley, is generally dropped; and an enclosed porch substituted in its place, so that the rooms of the house will receive the grateful sunshine. Thus they are frequently comely little buildings in spite of the flimsy way in which they are constructed; and let us trust that this sort of house will gain in popu-

larity compared to the formless "Queen Anne" cottage with its affectation of picturesqueness and its general air of commonplace impropriety. In the East where large cellars and deep foundations are necessary even in cheap houses, the "Queen Anne" cottage has at least the merit of being less expensive than lower and better proportioned buildings; but in California it fails to have even that humble virtue. There is no economy in cocking up in the air a house which usually lacks anything worth the name of a cellar and foundation. On the contrary, the lower building, which fits tight upon the ground, may well be cheaper to construct; and in the interest of good, simple architecture it can be as



DETAIL—RESIDENCE OF J. W. McNEILL, ESQ., PASADENA, CAL.
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cheap and flimsy as it pleases, provided only it perpetuates the better tradition. The influence of good tradition is in such cases all the more important, because these little houses are never really designed. They are merely duplicated

by the thousands, like pairs of shoes; and their only salvation hangs upon their bondage to some decent model.

The small suburban house shades off by imperceptible degrees on the one hand, into the bungalow, and on the



THE HOLLISTER RESIDENCE, HOLLYWOOD, CAL.
Greene and Greene, Architects.

other hand, into the larger suburban house; and these types of residence are to be distinguished from the one already described, because they are as a rule consciously intended to look pleasing. The bungalows are indeed generally such very cheap little buildings that no architect's fee can enter into the cost of their construction; but they are none the less houses which are built as much for pleasure as for use, and the owner or his wife almost always has certain aesthetic ideas which the house must satisfy. Fortunately these ideas are for the most part good; and the bungalow usually tends to be a picturesque variation on the type of the small suburban house. If the builder goes astray it is generally because he becomes conscious of the fact that he is designing a house in the country. He frequently tries to obliterate as much as he can, and more than he should, the necessary difference between the form of his house and the form or

features of the landscape; and in this way he falls into what is from the point of view of sane architecture, a meaningless affectation of rusticity. More often, however, these little bungalows are characterized by a simple and unaffected propriety both of design and in the use of materials which to an Eastern visitor is both novel and highly pleasing. They are worth careful attention because during the next few decades they will undoubtedly increase prodigiously in numbers. They are admirably adapted to the Californian climate; they are within the means of all but actually poor and overworked people; and there are an inexhaustible number of charming spots, both on the sea coast and in the hills and mountains, which are sufficiently accessible from the larger cities to invite their erection. Finally they possess in a high degree that informal and provisional character, which the majority of Californians continue to prefer, and



PATIO IN THE HOLLISTER RESI-
DENCE, HOLLYWOOD, CALIFORNIA.
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RESIDENCE OF D. R. GAMBLE, ESQ.,
PASADENA, CAL.
Greene and Greene, Architects.

which is the result of the comparative newness of their economic and social life.

We must lean, however, to the suburban houses which are expensive enough to have been designed by architects in order to find how good (and how bad) wooden buildings in California may be. It is unfortunately true that on the average houses of this class are less acceptable than their cheaper neighbors. They may not be as a rule any worse than the majority of summer houses erected in the East and the middle West, but they are more disappointing, because one's eye in California is keyed up to crave and almost to expect something more appropriate and entertaining. If, however, the majority of the more expensive

frame houses are unworthy, there is a minority of the elect, which constitute some kind of a compensation. These buildings must be classed among the very best attempts which have been made in this country to give a wooden frame building a characteristic form and texture. Our wooden houses have been for the most part cursed by the fact that both owner and architect have been ashamed of their chosen materials and were trying to make wood as in one way or another a substitute for stone; and it is peculiarly refreshing consequently to find, as we do in California, evidence of a very general desire to use wood in some more idiomatic and appropriate way. The native Californian red wood is a tim-



BUNGALOW OF DR. CLAYPOLE, PASADENA, CAL.
Greene and Greene, Architects.



RESIDENCE OF J. H. THORSEN, ESQ., BERKELEY, CAL.,
GREENE AND GREENE,
ARCHITECTS.



LIVING ROOM—RESIDENCE OF FREEMAN FORD, ESQ., PASADENA, CAL.
Greene and Greene, Architects.

ber with admirable qualities, both for structural and ornamental purposes; and it is fortunate that a group of architects are coming to the front, who are prepared to do it justice. Maybeck, Matthews and others in the vicinity of San Francisco, and Myron Hunt, Elmer Grey and Greene and Greene in the vicinity of Los Angeles are all designing houses, which are picturesque without being affected and free and bold without in general being freakish and bizarre. Their work gives one the sense, so rare in this country, of being at once freely and vigorously imagined and carefully composed.

Our countrymen, however, have given unmistakable indications that they cannot be satisfied with country houses, which are either provisional and informal or suburban. As their means increase they have sought to make the country house as an architectural type more and more complete and elaborate.

This has meant the substitution of more permanent materials for wood, and the attempt to surround the house with grounds which are laid out and planted for the purpose of bringing out architectural values. All over the country, but particularly in the vicinity of New York, the richer Americans have been rearing country houses which were comparable in scale and magnificence with the historic country places of Europe; and if the attempt has not been wholly successful it is not because money has been spared. One can find certain traces of this ambition in California. In the vicinity of San Francisco, Los Angeles and Santa Barbara country houses have been built, surrounded by abundant grounds, which are intended to be something more than informal and suburban. The intention has not been as fully realized as it might because wealth has not as yet been accumulated in California so largely as it has in the East:



ENTRANCE DETAIL—THE PRATT RESIDENCE, NORDHOFF, CAL.
Greene and Greene, Architects.



RESIDENCE OF J. N. CULBERTSON, ESQ., PASADENA, CAL.
Greene and Greene, Architects.



THE McNEAR RESIDENCE, MENLO PARK, CAL.
Bliss and Faville, Architects.

but its completer realization is obviously only a question of time. Indeed one may safely prophesy that California, more than any other state in the Union, will little by little become the land of great country estates, because not only will the well-to-do Californians themselves seek more permanent and elaborate houses, but the New York and the Chicago millionaire will frequently covet a fitting residence in California, just

as an English Duke or a German Prince has his villa on the Riviera. The Californian country side is assuredly destined to become something more than a granary and a fruit garden for its permanent residents and a health resort for birds of passage. Certain favored parts of it are manifestly destined to be an ornamental garden for Americans, both from within and without the state, who want and can afford the most elaborate



THE McNEAR RESIDENCE, MENLO PARK, CAL.
Bliss and Faville, Architects.



THE MCNEAR RESIDENCE, MENLO PARK, CAL.
BLISS AND FAVILLE,
ARCHITECTS.



THE McNEAR RESIDENCE, MENLO PARK, CAL.
Bliss and Faville, Architects.

and highly wrought pleasures of country life.

It is the design of these large houses in particular which need to be influenced by a single good and appropriate style. The larger houses already erected at Burlingame and elsewhere have a great deal of interest, not so much because of their architectural design as because of the example they afford of how much Californian vegetation can do in a short time for Californian landscape architecture; but their appearance does not betray any sufficiently definite appreciation of the fact that the nature of the Californian landscape calls for a certain kind of house. As was remarked heretofore, the design of these larger houses

are derived from sources as miscellaneous as those which are erected in the much more radically diversified climate and countryside of the East; and it is of the utmost importance now when the practice of landscape architecture is only beginning that the most appropriate style should be selected and should come to have a certain authority. Hence, in order to justify the claim that the landscape does call for one sort of house rather than another, I must briefly consider what the character is of the typical California landscape.

The many beguiling aspects of the Californian country have been sufficiently described and admired; but so far as I know the hillsides near the coast



BUNGALOW AT ALTADENA, CAL.
S. B. Marston, Architect.

have never received the tribute they deserve merely as a consummate opportunity for formal landscape architecture. I limit this tribute to the hillsides near the coast, because the slopes of the Sierras and the plains of the interior valleys, whatever their other advantages, do not possess any peculiar affinity for one kind of country place. The steep wooded slopes and the far-reaching perspectives of the mountains are adapted to the temporary shelter and the primitive occupations of the camper rather than to the artificial and complicated needs of the "country gentleman," while the hot summers and the broad level

stretches of the San Joaquin and Sacramento Valleys, much as they benefit the farmer, will hardly tempt people who are economically independent in their choice of a country residence. But almost all along the coast, and on both sides of the coast range, the ordinary country side is from every point of view consummately adapted to complete human habitation. There is scarcely any need to search for peculiarly beautiful and appropriate sites, although, of course, some spots will necessarily be comelier and more convenient than others. The landscape in its most familiar characters of scale, contour, dis-



RESIDENCE OF J. W. ROBINSON, ESQ., BEVERLY HILLS, CAL.
Hunt and Burns, Architects.

tance and vegetation appears almost to have been fashioned for the purpose of providing a fitting background for a rural architecture, which has been informed by the classic spirit.

The peculiar propriety and beauty of such a landscape escapes the attention of many Americans, because admiration of the spectacular and picturesque in nature has become with us almost an aesthetic tradition. Many of the early American painters fostered it, and it has been encouraged by the fact that the peculiar impressiveness of the general American landscape, as compared with that of Europe, depended upon its wildness and its grandeur—that is upon, in general, its spectacular and picturesque qualities. Consequently when the American comes to build a country house, he has a tendency to seek the highest hill

and the largest view in the chosen neighborhood. And this propensity has not had a very happy effect upon American landscape architecture. The high hill and the sweeping view are all very well in their way, but they rarely provide a congruous setting for a house or a favorable opportunity for a convenient and attractive lay-out of the grounds and garden. The country house needs a landscape which is smaller in scale, and in which our architectural contrivances are not made insignificant by the scale of their surroundings. Such is the character of the coast country in California. Of course it has its moments of grandeur and picturesqueness, but in its more familiar aspects this landscape is to be characterized rather as simple, sweet, normal and distinguished. It is as far from being merely soft and pretty



RESIDENCE OF DR. C. W. LEFFINGWELL, ESQ., PASADENA, CAL.
Hunt and Eager, Architects.



RESIDENCE OF WM. H. TAYLOR, ESQ., BERKELEY, CAL.
LOUIS C. MULLGARDT, ARCHITECT.



RESIDENCE OF H. B. AINSWORTH, ESQ., LOS ANGELES, CAL.
L. B. Pemberton, Architect.

on the one hand, as it is on the other from being wild and spectacular. It may consist of no more than a line of low bare hills whose deeply modelled slopes and round full contours relieve the monotony of a fertile plain. Or the whole country may be broken into a succession of hills and valleys, none of which are ragged, abrupt and precipitous, but whose whole lay-out is tied together by bold yet gentle lines and surfaces and separated by a multiplicity of level aspects, exposures and views. There is nothing either episodic and startling or vague and miscellaneous about such a countryside. The uplands are high enough to be effective, and the lowlands broad enough to furnish perspectives and approaches. They afford in acceptable proportions both foreground and distance, privacy and space, fullness of sunshine and depth of shadow. It is a landscape which would not only be spoiled by the stamp of intelligent human habitation but which would be as much improved by appropriate houses, properly planted, as a clipper is improved by

its sail or a bush by its flower. It really needs the enhancement of value, which may be derived from the evidences of human care and interest, and it welcomes some subordination to the practical and aesthetic requirements of civilized human residence.

In case these hillsides and valleys were well wooded, one could hardly say that they actually needed the enhancement of appropriate landscape architecture. It is the fact that they are, as a rule, almost if not entirely bare of large vegetation, which helps to give the landscape architect such an incomparable opportunity, and which enables him at once to serve his client and to bestow a higher aesthetic value upon the countryside. He does not even have to destroy one value in order to create another, as he might in case the country were well wooded. He merely has to add to the country the sense that it is not only latently human, but actually humanized by the habitation of cultivated and appreciative people; and in this task of properly settling his houses and



RESIDENCE IN LOS ANGELES, CALIFORNIA.
ROBERT DAVID FARQUAHAR, ARCHITECT.



DETAIL—RESIDENCE IN LOS ANGELES, CAL.
Robert David Farquahar, Architect.

roads upon the countryside he can call upon resources in the way of available planting as rare and as complete as the character of the landscape itself. Not only will anything and everything grow upon these hills, provided the water sup-

ply is sufficient, but the trees and shrubs which grow most easily and which are to-day most familiar are generally most useful. The landscape gardener has at the outset the great advantage of being able to dispense almost entirely with



ENTRANCE DETAIL—RESIDENCE IN AZUSA, CAL.
ROBERT DAVID FARQUAHAR, ARCHITECT.



RESIDENCE OF E. R. KELLAM, PASADENA, CAL.
Robert David Farquahar, Architect.

deciduous plants, and inasmuch as outdoor life is to be enjoyed both winter and summer he should use this advantage just as far as he can. Among these available evergreens, the live-oak is easily the king. One can scarcely be too enthusiastic about this tree, which nature seems to have allowed to grow wild on the hillsides, so as to provide a foliate background for the houses of men. No other evergreen has anything like as high a value in immediate relation to a house and garden, unless it be its relative the Italian ilex; and in the cooler summers of the Californian coast country the spreading foliage of the live-oaks which allows the desirable sunlight to filter through, is both more useful and more beautiful than that of the impenetrable ilex. And if the common live-oak is precisely adapted to supply certain of the foliage which may be desirable in the immediate vicinity of a house and garden, the equally common eucalyptus serves quite as well for use along the lines of roads or in general for planting in many places at a greater distance from the house and garden in which high masses of dark foliage may be effective.

But I have no room to specify further. The many varieties of acacia, the olive, the Monterey and Italian cypress, certain peculiarly novel and adaptable kinds of pine, all of these plants and many others, which possess an almost equally distinctive value, offer themselves for ornamental planting in relation to the Californian country house and garden; and if they are used discreetly, and in subordination to the architectural scheme, the roads, terraces, walls and buildings, so far from marring the landscape, will merely add to it a human confirmation.

Rare and highly distinguished as the Californian countryside is, it would be a great mistake to assume that its high distinction demands a peculiarly Californian type of building. Doubtless any traditional type of residence which came to prevail would have to be modified in certain respects in order to adapt it to the peculiarities of the climate and of the life of the inhabitants. Nevertheless Californians should never forget that the distinction of their landscape consists in its possession to an extraordinary degree of certain ordinary qualities. It is a consummate example



ENTRANCE DETAIL. RESIDENCE OF
E. R. KELLAM, ESQ., PASADENA, CAL.
ROBERT DAVID FARQUAHAR, ARCHITECT.



ENTRANCE DETAIL—RESIDENCE OF DR. JOHN R. HAYNES, ESQ., LOS ANGELES, CAL.
Robert David Farquahar, Architect.

of certain characteristics in a countryside which have in the past proved to be most permanently satisfactory to people who combined elaborate and cultivated tastes with the love of nature. The better domestic architecture, whether of Italy, France or England, has rarely been situated in a picturesque and rugged

country. It is almost always to be found in a landscape, similar to that described above, only as a rule rather less complete and adaptable. The Californian countryside, while neither English, French nor even Italian, is something better than any of these. It is normal. It is temperate. It is well balanced.



RESIDENCE IN SIERRA MADRE, CAL.
Robert David Farquahar, Architect.

It is classic. Like all classic and normal things, it makes its effect by a mixture of daring and discretion, and is as free from timidity on the one hand as it is on the other from excess. The architectural and horticultural embellishment which it receives should partake of the same character. It should seek effects which are both simple and vivacious, but whose simplicity is not obtained by mere reticence and elimination, and whose vivacity is neither disorderly nor bizarre. Its simplicity, that is, is precisely equivalent to a triumphant mastery of all the elements, either natural or architectural, which contributes to the total effect. Its architecture should not mutilate the nat-

ural grace of the countryside in the interest of some stiff and rigid scheme, but neither should it fear to impose an appropriate architectural scheme upon the round contours of the hills. It should neither try to imitate natural effects in its architecture and planting nor should it seek to sear the landscape with lines which ignore and disregard such natural effects. Just as it is the part of good manners to be polite and cordial without being stiff and insincere, so it is the part of good landscape architecture to be formal and self-possessed without being unnatural and prim. In the absence of some such intimate and successful combination between the artificial, practical and aesthetic needs of men and the art-



DETAIL. RESIDENCE IN SIERRA MADRE, CAL.
Robert David Farquahar, Architect.

less irregularity and diversity of nature, the architecture of a country house and its grounds cannot possess any classic propriety of form.

Such being the architectural needs of the Californian landscape, it is peculiarly fortunate that California possesses historical associations with the most complete embodiment of the classic spirit in domestic architecture, viz.: with the Italian villa and garden. Of course the association is not direct and the type must be modified very much in the transfer, but the allegiance and the obligation are unmistakable. The Spanish dwelling from which the adobe house was descended is, as I have said, a picturesque version of the Italian convention in the

design of residences, and what the Californian landscape needs is a modification along somewhat more picturesque lines of the Italian villa and its surrounding architectural and horticultural treatment. But in trying to describe in general what these buildings may look like, it would be a mistake either to go too much into detail or to keep any specific Italian villas too much in mind. Any general type of house, which is recommended as specially appropriate, must be capable of the widest variations, so as to suit the many different determining conditions of site, exposure, natural planting, convenient ways of approach and possible cost. It is much more important to insist upon the essential ideas which ought to shape



RESIDENCE IN SIERRA MADRE, CALIFORNIA.
ROBERT DAVID FARQUAHAR, ARCHITECT.



RESIDENCE IN SIERRA MADRE, CALIFORNIA.

Robert David Farquahar, Architect.

the design and planning of these houses than to attempt to describe very much in detail their characteristics.

The design of every country house, which is a matter of serious architectural consideration, should be approached from two points of view—the point of view of how the house will look in relation to the landscape, and how the important features of the landscape will look when seen from the house in relation to the necessarily artificial arrangement of its grounds. In the case of the country house in California, the first of these points of view is of more than usual importance. The coast country consists throughout of small hills and valleys, and the tops of these hills will naturally be generally chosen as the sites for dwellings. In such situations these houses will be conspicuous features in the landscape. They should be designed so that they will neither be out of place on their hills, nor merged inconspicuously into them and the surrounding trees. They should consequently be buildings which are long in proportion to their height, because a house which is cocked up in the air does not look well on a hill,

and because the live oaks which will be planted in their immediate vicinity are not big enough in scale to provide a proper background for a tallish building. The walls of these houses should be light in color, because a very positive color is the best means of emphasizing a building, which is both conspicuous and is surrounded by trees, and because white or light grey houses look well in the brilliant Californian sunshine. It should have a gently sloping roof, but one which is broken in outline, large in surface, gay in color, and emphatic in the shadow which is cast by its eaves. A building in the foregoing type would resemble in some respects an Italian villa, but it would have many characteristics which depended upon local conditions. It would be a more picturesque building than the Italian villa usually is, because the American taste for the picturesque is too strong to be disregarded. Its walls would be pierced by many more openings, because the sunlight is grateful and necessary, even in California, and because the plan of a modern American house demands a large number of rooms and consequently of windows. Then again,



A RESIDENCE IN PASADENA, CAL.
Robert David Farquahar, Architect.

the amount of ornamental detail to which one is accustomed in Italy might well be reduced on these houses, because in our country such detail costs more than it is worth. Sculptured ornament there will be, of course, but the architect should depend for his effect upon the masses and color of his building, and the shadow it casts, and its plainness should be relieved chiefly by trees, shrubbery and vines.

When we come, however, to consider the house, not from the point of view of its place in the landscape, but as a means of introducing its inhabitants to the countryside and there amusing them, we reach a very different set of requirements. The house must not merely hold its own in the landscape without becoming an excrescence, but it must be planned in relation to its surroundings so as completely to satisfy the complicated practical aesthetic needs of its inhabitants. Such is the meaning and the purpose of formal landscape architecture and gardening. The formal treatment of a country place does not consist, as many people seem to imagine, in laying out straight roads and paths irre-

spective almost of the nature of the ground, and then outlining or terminating them with walls and pergolas. It consists, first, in laying out the roads, approaches and buildings connected with the estate so that convenience will not interfere with the good looks. It consists, secondly, in effectively outlining the most beautiful landscape views, which are accessible in the immediate vicinity of the house and in shutting off those which are not beautiful. It consists finally, should a flower garden be wanted, in giving that flower garden a size, a layout and a frame, which is adapted to its situation and its necessary natural and architectural surroundings.

The difference between a formal and an informal treatment of a country place lies not so much in a difference of purpose as in a difference in method. An informal treatment would seek the same objects, but in doing so it would eschew so far as possible straight lines and architectural features. Its originators had a theory that straight lines and architectural frames and features are unnatural, whereas as a matter of fact they are no more unnatural than is the house



THE GARDEN FRONT OF THE BRAGG RESIDENCE, PASADENA, CAL.
Robert David Farquahar, Architect.

itself, or any other evidence of civilized life in the country. They are artificial, but given the proper surroundings they can be made entirely appropriate. Straight lines are necessary, because a straight line is the shortest distance between two points and because the eyes of men cannot see around a curve, and landscape architecture is necessary because only by such means can the necessary vistas be filled, and the desirable definition and furniture given to the landscape. But all these architectural features can be and should be relieved of their rigidity by an abundance of appropriate planting. It is by virtue of the trees, shrubs and vines that the architecture takes its place in the natural surroundings, but it only does so on condition that the planting is planned so as either to soften an architectural line or to complete an architectural effect. The average American's idea of planting in the vicinity of a country house is to put a shrub which they like in the ground, wherever it will grow, but in any formal scheme the planting must be subordinated to the general effect. At one point foliage of a certain color, density and mass is required, at another point foliage that is smaller in mass and more dense in its habit of growth. And the same

principle must be extended to the planting of the garden. The flower garden is not merely a place in which flowers are grown; it is a place in which the flowers which are grown are seen to the best advantage. The dominant note of such a garden will always be green, and the bright colored flowers will always make their effect against masses of green foliage.

This is not, however, an essay in landscape gardening, and I cannot go any more into detail. But it was desirable to give some idea of the house and garden which was adapted to the coast country of California, because that country manifestly demands a certain kind of architectural treatment. Such methods of treatment may or may not come to prevail, but whatever authority the architectural profession can exercise in California should be used in their favor. So rare and perfect an opportunity exists nowhere else in the United States, and it remains to be seen whether Californians will have the good sense to use it discreetly. They will have every temptation to go astray, and to disfigure the landscape with an eruption of architectural and horticultural blotches, because it is a country in which almost any kind of house is practical and almost

any kind of plant will grow. Nevertheless there are at least some reasons for believing that they will come to appreciate the desirability of treating such a simple, temperate and normal landscape in a simple, temperate and normal spirit. The Californians love their country without affectation and without effort; they possess a greater potency of successful achievements in the arts than do the inhabitants of any other single sec-

tion of the Union; and, best of all, they have shown an unusual power of co-operating either formally or informally to accomplish some purpose which is recognized to be good. They show an active and adaptable intelligence, that is, without being arbitrary and perverse in its exercise, and they may well reach some common sensible understanding about the sort of country house best adapted to their countryside.



RESIDENCE OF DR. C. H. FROST, HOLLYWOOD, CAL.
Arthur R. Kelly, Architect.



Photograph by George R. King.

THE ENTRANCE TO BELLA VISTA
TERRACE, SIERRA MADRE, CALIFORNIA.
IRVING J. GILL, ARCHITECT.



THE ENTRANCE, BELLA VISTA TERRACE, SIERRA MADRE, CALIFORNIA.

Irving J. Gill, Architect.

The architect has returned to the rudimentary principle of the line and the circle.

THE GARDEN APARTMENTS OF CALIFORNIA

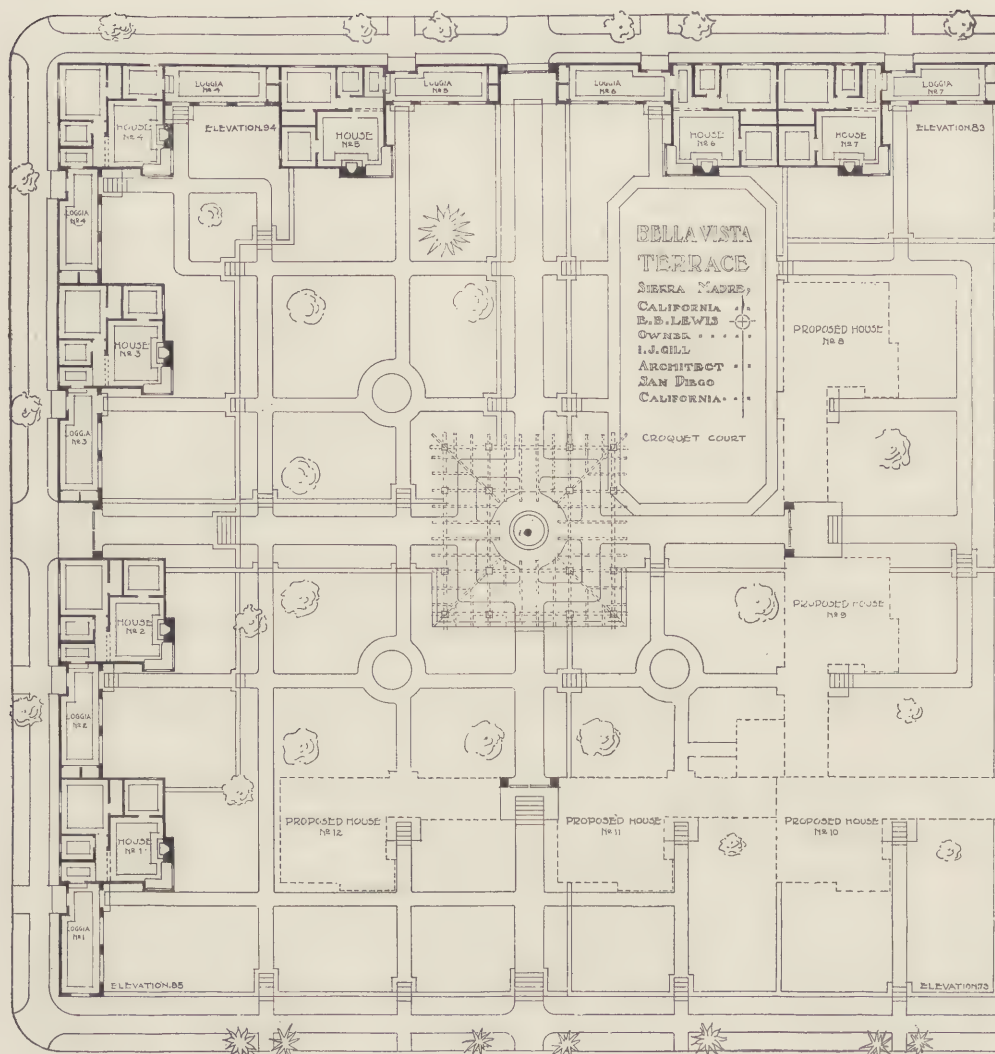
IRVING J. GILL... ARCHITECT
BY
E. M. ROORBACK



MAN HAVE SUCCEEDED in building pleasing and livable homes in all sorts of seemingly impossible places, such as on wind-swept mesas, in sun-baked deserts, in lands of eternal snows and in fever-poisoned swamps, but it has taken California to produce a man with imagination brilliant enough to build a home in an apartment house. All real homes have gardens and privacy, individuality and domestic atmosphere—virtues foreign to apartment houses in general. Some apartment houses have the excellent qualities of being conveniently located, cleverly economical of space, lavish as to

dumb waiters and elevators. But they have a most distressing way of introducing a brick wall where a view ought to be and a diabolical way of shutting away the fresh air and sunshine. They huddle people together in crates, as it were, and pile them one above another as if human beings were trapped pigeons remorselessly being shipped to market. They are uncomfortably reminiscent of the cramped compartments of Noah's Ark, the Tower of Babel, the Catacombs of Rome, the Cave Dwellings of Arizona.

These buildings of California have drawn the opposite poles of human habitations—a home and an apartment—into one aesthetic and practical unit, embodying the best characteristics of each. They consist of separate houses with separate entrances, exits, halls and gardens, placed side by side as flowers are placed in one



THE LAY-OUT OF BELLA VISTA TERRACE, SIERRA MADRE, CALIFORNIA.
Irving J. Gill, Architect

garden. The interest of all the small homes focuses in one large central garden which in turn centers in a pergola that is partly covered by vines so that it provides shade or warm sunny seats as preferred, at the different seasons or hours of the day. The separate houses are built around the four sides of a city square. Back of each house is a private garden. Back of the private garden is the central one with its immense pergola and attractive planting.

The whole plan is strikingly original as

to treatment of a given space, style of architecture, and construction. It is fire-proof, almost indestructible and absolutely sanitary. It is beautiful in design. It is simplicity carried to the last word in architectural art. These garden apartment homes occupy a plot of ground 250x200 feet, at the foot of Mt. Wilson in Sierra Madre. Each home has been designed so that not only do all the windows frame a view of the San Gabriel Valley, but they furnish a picture to all who live in the valley. Their white, vine-

draped walls, dappled by massed colors of the garden flowers, softly silhouetted against the dark green of the Sierra Madre mountains, can be seen from all over the valley.

The architect, Irving J. Gill, with the courage of an explorer in untraveled country, has boldly returned to architectural first principles—the line, square and circle. He has not only returned to them, but has not departed one jot or tittle from that old, old vantage ground. Not a single excrescence commonly known as ornament, disturbs the serenity of these first principles. He has daringly relied upon the eternally forceful and attractive laws of contrast to furnish the beauty and charm. He artfully embodied the *permanent* principles in the straight line and circle, then starts the *impermanent* principle embodied in the vines and creepers, to move across the face of the buildings gracefully breaking their severity.

The result has placed him in the front rank of those who design for beauty and construct for permanence.

Each cottage is entered through a loggia, walled on the outside, but facing into the garden so that it can be used for a sleeping room at night and a lounging room by day. From this cheerful room or court is the hallway which gives entrance to the living and dining room and also into the bedroom and bath. They are constructed of hollow tile and concrete, reinforced with steel and covered with asbestos. The inside and outside is finished with the best of cement plaster, treated with a moisture-proof preparation which insures perfect dryness at all seasons.

The feature that makes these houses so exceptionally sanitary is the treatment of the interior walls and floors. The walls and the floors are of cement, one rounding into the other so that it is ver-



THE CENTRAL PERGOLA, WITH APARTMENTS BEYOND. BELLA VISTA TERRACE,
SIERRA MADRE, CALIFORNIA.
Irving J. Gill, Architect.



AN ARCHWAY IN BELLA VISTA TERRACE, SIERRA MADRE, CALIFORNIA.

Irving J. Gill, Architect.

The gardens are all planned for vistas.

min and draught proof. The bath tubs and kitchen sinks are sunk in magnesite, finished flush with the concrete walls. There is not a chance for the slyest of germs to lodge anywhere. No grease can collect. The casings are finished flush with the walls, so that dust has no chance to lodge and defile the air. The electric wiring is in conduits. The fireplaces are indented.

The gardens comprise a series of terraces faced with rough stone. The pergola is of concrete pillars with a eucalypt-

tus frame. Seats and hammocks, tables and chairs offer every comfort as one rests and looks up to the mountains or out over the valley. The floor plan of these cottages, known as the Lewis cottages, shows how the ground has been divided as only California can afford to divide ground—devoting more space to the garden than to the house. This is because people regard the outdoors as being a better place in which to live, work and play than the four walls of a room.

Seven of these houses are finished and planted and the other five are in process of construction. Beside the private entrances to each house there are four others leading from the street to the center of the whole place. These are mainly to secure vistas of beauty, for Mr. Gill never fails to plan for pictures. Every arch of his gateways, doorways, walls or windows is placed to frame a picture. He insists that pictures as well as gardens must be a part of every dwelling. The garden is so essential a feature of his homes that he includes the designing of them in the house plan and this should be the case with every architect. Garden and House are one and indivisible in his mind. Not only this, but he makes the garden take a second blooming upon the walls of the rooms. This is accomplished by the quality of the inner wall surface—his own secret. It catches the garden colors and spreads them out, indistinctly formed, on wall and ceiling until the rooms seem to be overlaid with mother-of-pearl, only softer and shifting, as if sentient. The living and growing garden exists as a charmingly real thing out in the sunshine. Its spirit dwells within the home.

This same plan of an apartment house

that is like a home, with an open fire-place, a separate entrance and garden in addition to a general garden, has been tried in San Diego, modified in some ways. The San Diego apartment homes are known as the Darst Buildings. The floor plan shows that a generous garden space has been allotted by Mr. Gill for each home. Each apartment has a lawn bordered with flowers, its own outdoor store-house. Arched walls and pergolas, overrun with creepers and festooned with vines, connect all the paths, walks, terraces and patios into one attractive whole. These flats, if such a name can be applied to anything so home-like, were planned to house human beings in a home-like, attractive way. They are so very like homes that nothing but the necessity of a trip "back east" or a tour of the world, can ever persuade a tenant to vacate. As a business venture, the construction of apartment houses that have all the atmosphere of a home, is a decided success. Beauty is recognized nowadays as a significant business asset to be seriously reckoned with.

The plans of the different apartments are excellent, for they are wonderfully convenient. The balcony overlooking the gardens is variously used for a sleeping porch, sewing room, trunk room, study or smoking den. The interior finish is the same as in the Lewis cottages—the woodwork flush with the walls, tubs and sink sunk in magnesite so that dust and germs have no chance for existence here.

That man who bitterly complained that it would take "all the eyes of Argus and all the clubs of Hercules" to make an architect build a house that was perfectly planned and perfectly constructed, would never have penned his growls of rage



AN ARCHWAY ENTRANCE TO A PATIO—THE DARST HOUSES, SAN DIEGO, CAL.

Irving J. Gill, Architect.

could he have had the good fortune to have founded his home in California. For here the architects (some of them, at least) do not need watching to make them plan conveniently, nor is any club required to make them build practically and well, to construct a house with no architectural deceits. The modern architect is a combination of men possessed of various odds and ends of knowledge. He knows about the endurance of materials, the intimate ways of home life, about the need of linen closets and kitchen pan-



TWO VIEWS OF THE ENTRANCE—THE DARST HOUSES, SAN DIEGO, CALIFORNIA.

Irving J. Gill, Architect.

Note in the first, the softening effect of the vines at the base, and in the second the quaint charm of the "stepping stone" garden walk.



THE GROUP OF THE DARST HOUSES. SAN DIEGO, CALIFORNIA.

Irving J. Gill, Architect.

To the right, the garden wall, characteristic of Gill's use of the arch.



Photograph by George R. King.

ENTRANCE DETAIL—THE DARST
HOUSES, SAN DIEGO, CALIFORNIA.
IRVING J. GILL, ARCHITECT.



The hollow square from within, the cottage-apartments placed side by side in their gardens.



Terrace and loggia of one of the houses—An interesting study in line and hemi-circle.



The central pergola, with the Sierra Madre Mountains and San Gabriel Valley in the distance.

THREE TYPICAL BITS OF BELLA VISTA TERRACE, SAN MADRE, CALIFORNIA.

Irving J. Gill, Architect.



ONE OF THE APARTMENTS OF BELLA VISTA TERRACE, SIERRA MADRE, CALIFORNIA.
The private gardens are in a series of terraces, faced with rough stone.



A VIEW SHOWING THE CONFORMATION OF THE APARTMENTS, BELLA VISTA TERRACE,
SIERRA MADRE, CALIFORNIA.
Irving J. Gill, Architect.



VIEW FROM WITHIN THE PATIO OF ONE OF THE DARST HOUSES, SAN DIEGO, CAL.
Irving J. Gill, Architect.

tries, about how to make little children and tired men happy and comfortable, about the vines that creep daintily and those that riot luxuriantly, about the flowers that thrive in patios and those that prefer the sunny outdoors. He is a dreamer, poet, naturalist as well as draughtsman and builder.

These two apartment homes prove this, for it took a dreamer's imagination to conceive them. They are comfortable and convenient to live in and beautiful to look at. Their construction has been personally supervised, so that neither time, fire nor storm can destroy them.



EXTERIOR OF ONE SIDE OF BELLA VISTA TERRACE, SIERRA MADRE, CALIFORNIA.
Irving J. Gill, Architect.

The intention here was to give seclusion from the street. The treatment is typical of Spanish and Spanish-American dwellings.



THE MORGAN LIBRARY, NEW YORK CITY.
McKim, Mead & White, Architects.

"THE OUTLOOK AND IN- LOOK ARCHITECTURAL"

AN ADDRESS BY JOHN GALEN HOWARD, READ BEFORE
THE NATIONAL INSTITUTE OF ARTS & LETTERS IN NEW YORK



AS THE TWIG is bent the tree is inclined." The die was cast, for the distinctive character of American architecture, for all time, I guess, when a certain Pilgrim first set an old-world foot on Plymouth Rock and found it—good building material; a trifle hard and therefore difficult to work, doubtless, with some few fractures, or at all events distinctly noticeable stratifications or lines of cleavage, and with not a few rough edges; but, on the whole, sound, as rocks go, and firmly fixed in ancient world-tradition. Strong stuff was Plymouth Rock; but it held its own not merely by reason of its strength, but by virtue of the *sort* of strength it had. An architecture is determined neither by

material alone nor by the mind that moulds it, but by both together, inseparable and interactive. No mere cart-horse kind of power was the force which fashioned Plymouth Rock; kinship in mettle to the Arabian thoroughbred gave it aptness to the desert task, with its long thirsts and hungers, its utter isolations, its lonesome yearnings. Not *mere* strength, but *refined* strength, was its property. For Refinement—that sort which is a thing of eliminations rather than of delicacies and determined about equally by temperament (coldness of temperament, agreed, in this case) and by means too straitened for much kicking over the traces even had the blood been hotter; Refinement was *one*, if not *the*, salient characteristic of the architecture which *became* in those old days out of arduously shapen Plymouth Rock; and in spite of all the kicking over the traces in which our people have

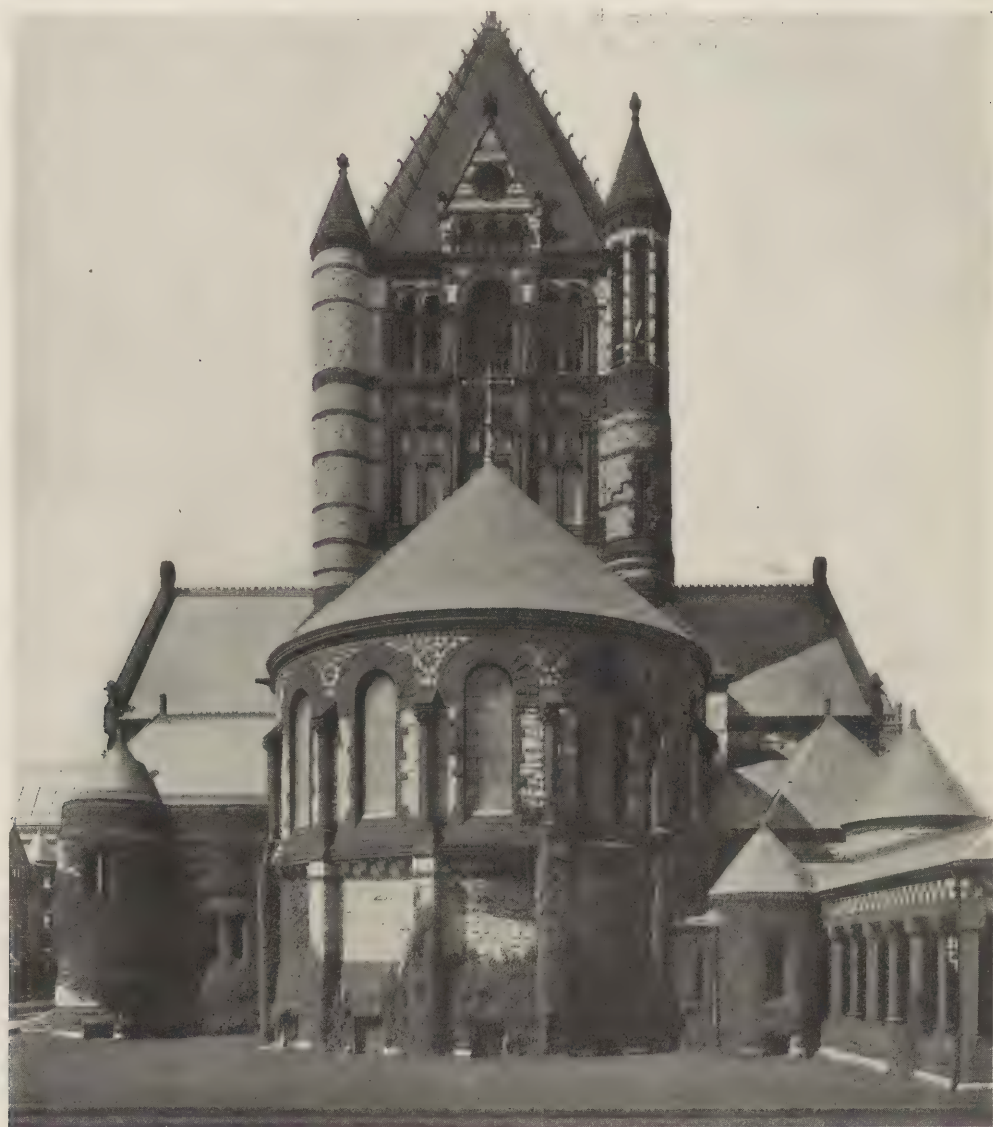
indulged in more recent times, Refinement, even though it be of another stripe, is still a dominant characteristic of the American style. There is, I suppose, little room for disagreement as to the old work—look at the delicate, thin treatment everywhere, the paucity of ornament, the dryness of surface, the amenity (not inconsistent with a degree of vigor either) of the whole—above all the total absence of anything remotely resembling “splurge.” These points witness a psychological tendency quite independent in a way of the particular forms used—of the “styles” in which it found its tongue. One thinks of the pure beauty of the Greek work: of the grandeur of the Roman: Byzantine spells splendor: the mediæval cathedrals voice daring aspiration—so our Colonial work connotes essentially that not very large, perhaps, but at any rate (so far as it goes) admirable quality which I have named—and, of that quality, the phase in which almost ascetic restraint plays the major part. Granted. But is it as readily evident that that same quality runs through, and indeed informs our characteristic architecture of today—with its wide range of “styles,” its genuine eclecticism, from the point of view of the field as a whole, however “correct,” within their own choice of style, individual practitioners may be; is it clear that this note of refinement is dominant? Does the point need some discussion? That may be.

Suppose, to start with, we look back over the way we have come.

“Cut out passion!” not “Make passion lovely!” was the law—unwritten—of early cis-Atlantic effort in the way of art, as of life; of art, what there was of it, doubtless *because* of life. Yet, after all, he who sets himself consciously to cut out passion lets his cat out of the bag—there must have been the passion to cut out; and the chances are that, sooner or later, if he seeks to cut out passion by putting it in a bag, he will bring about all the more viciously mordant scratchings, and, in the end, if the cat is really there, and a *cat*, with the customary complement of lives, and all the more tempestuous felinity of escape,

by way of rugged rent instead of by way of neatly hemstitched placket. We have sometimes been privileged to observe the cat in the act of issuing from the bag, and by that issue—as indeed by all self-respecting cats—there hangs, if you will permit the expression, a tale: and, in this case, what is more, a tale of passion—which proves reassuringly that the cat *was there* any way. As the saying is, “A muffled cat is no good mouser.” Open bags make more successful nests than do tied bags prisons—for the architect they make capital warm nests in fact, as “styles,” while as prisons “styles” are apt to be either too strong, in which case they inhibit action, or else they are too flimsy and invite disrespect. If at times our cat has been too closely muffled, the escapes, not to say the escapades, have restored, or tended to restore a fair average. As a whole our architecture can hardly be said to be too “correct!”

Half a century or more ago we saw the cat of the English Gothic revival, poor creature though it were, and worse for water-wear (which all cats hate), scratch out the eyes of our Colonial tradition, and leave it nigh to death, with “none so mean to do him reverence.” The purest poetic justice was done when, reversing the ancient course of architectural history, Gothic was transmogrified into Romanesque. The most anemic of all lack-cap stocks begot the fullest blooded of all sports. There was passion for you! and not in a bag at that! But is this a *cat* I see? Nay, a very lion in the way, a king of cats, ’twould seem, who can consent no further than to hold a bag to be a convenient nest or lair of refuge, when desired, but never, never, never such a pitiful thing as a prison. “In truth, the prison, unto which we doom ourselves, no prison is,” and styles *may* be comforts to the creative mind, but only on condition that they have no drawing strings. So, at all events, Richardson regarded his Romanesque; its sounding name was as an open sesame to consideration,—a big stick of resonant “authority” if you like,—but, you may rest well assured, not for a moment a limitation to the activi-



The Architectural Record, August, 1911.

TRINITY CHURCH, BOSTON, MASS.
H. H. Richardson, Architect.

ties of his imagination. And that may be one reason why his "style" was not found to serve in the long run. It was too personal, it operated on too narrow a margin of common consent, in spite of all its own robust splendor. Being so personal, the range of vision, for other workers, was too close,—there was not room enough in it for more than that one great personality which in-

formed and filled it and made it in certain ways, and in certain very important ways, too, big with promise.

All this time poor little Colonius lay stripped of his raiment and wounded by the way. Priest in the gown of Gothic; and Levite with Provencal scrip, had not so much as looked on him, but passed by on the other side. "But a certain Samaritan, as he journeyed, came where

he was; and when he saw him, he had compassion on him." On the face of things, *Colonius Redivivus* owed his oil and wine to the insight, taste and wisdom of McKim and White, and others of their group: (I should say particularly Mead, but for the manner of Anthologies, which omit the living names lest their owners blush becomingly, no doubt): but he owed his resuscitation fundamentally to his Americanism. McKim, Mead and White were the active instrument of a latent movement larger than themselves. The Colonial revival succeeded, not because that kind of architecture was the best conceivable, or because it was in such refreshing contrast with the preceding fashion, or because of the personal power of those who reintroduced it, great as that power was, or for any other reason whatsoever, but that it was in real harmony with the American instinct, taste and ideal. And it had the further advantage of being a worthy tradition, all the stronger and more acceptable for having been neglected for a time. Penitence pointed our return. Convalescence gave a fillip to what might otherwise have seemed insipid. Plymouth Rock too, under these circumstances, was found to have a sparkle.

We felt as if we had got back home from hospital and had a reasoning sense of knowing where we were. Very likely we struck out too blindly in our new health against the spell that just now bound us. We hated Romanesque so cordially that we could not fairly focus the compelling genius that loomed behind and above the smoke of our temporary aberration. In the new joy of finding a working system of architectural hygiene to which we were all equally heritors,—discovered to us, and interpreted, by masters, it is true, but ours just as much as theirs, after all,—we became possessed of a sense of well-being and of mastery which was most agreeable. And it was a habit well worth while acquiring, to be sure,—that using of a style whose limits we well know, and were pleased to accept. It induced a frame of mind which enabled us later to turn to other closely related, more monumental not to say more fundamental styles (styles which had all the while underlain the Colonial), and work in them with something flatteringly resembling the ease of mastery; with no small degree of archeological dryness, at times, we must concede, but with a "correctness" which, for the time being, was in itself a valuable quality,



THE HARVARD LAW SCHOOL, CAMBRIDGE, MASS.
H. H. Richardson, Architect.



The Architectural Record, September, 1911.

ALLEGHENY COUNTY SOLDIERS' MEMORIAL.
PALMER & HORNBOSTEL, ARCHITECTS.

providing the tendency were not carried too far. Architecture has, like other growing phenomena, to go to school before it can wisely be emancipated. It is a distinctly promising sign of future power, for a young people and for a young art as for a young man, feeling his oats, looking upon his individuality and finding it good, conscious of original power, to forget self for the time being in the quiet, assiduous acquisition of knowledge already established by others. The time for fresh personal expression will come later. But get the schooling first,—and, of course, as early as may be; for the blade of creative originality may lose its edge if it keep scabbard too long.

I have spoken of the succession of architectural styles among us. That is merely a convenient way of alluding to the several phases through which this art, and perhaps other arts as well, have passed in these latter decades. But I don't wish to lay too much stress on these phrases as "styles." In fact I do not take much stock in "styles" anyway. What I do take stock in, all I can get, and have the money to pay for, and I pray for more, is Style. The Gothic revival in this country in the middle of the last century was not really a revival of Gothic at all. The fact that pointed arches "came in," the pointeder the better, had nothing to do with it. The pointed arch was a fashion in architectural dress merely, like the crinoline or the poke bonnet; but gracious me! did you ever think for one minute that the lady inside the crinoline was that shape?—No more, then, the architecture that wore pointed arches was that kind inwardly. I adore the real thing too devotedly to let it be supposed that I mean what I say when I call that sort of thing Gothic; but one can't always tack across the page a dozen times to make port. One must go as the crow flies, especially if there's but twenty minutes headway or so. Take the old word for the new thought, and let's get on. Just as the Gothic revival wasn't Gothic, neither was the Romanesque Romanesque. They were both little more than the manifestation of phrases of our national

life,—ante-bellum and post-bellum. The former was the expression of a life gone to seed, dried up, finished, the last leaf dropped,—short of a new sowing. Then was "the winter of our discontent";—the "glorious summer" followed with all the exuberance of new life, and its expression in architecture was more exuberant even than itself, because of the overwhelming exuberance of the man responsible for the architecture. Of course in this we have to reckon with the wholly extraordinary Richardson. Without him and his personal passion for Romanesque, we should have had some other exuberance. He, like all other great men, have happened at just the right moment. Those not on our list have happened at the wrong moment: though, of course, the great moment tends to enlarge *all* its men, and make its great ones greater. That's what happened to Richardson; he was the great personality of the art of his time,—the period of reconstruction, of the laying in of the foundations of our real national existence; and the architecture of that period was determined almost solely by him. The artist and his period, his community, grew more exuberant hand in hand, each on its own account, and each the more for the other.

And, quite contrary to what it is now the fashion to maintain, the influence of Richardson has not proved ephemeral in its larger character and significance. The art of our own time is different and larger, for his foundation work. Whether we anathematize his art or admire from afar off (for there are few or none nowadays who venture to come nigh unto it), it must be recognized that because of him, because of his breaking ground, and making big and solid and sound when we began all over again, on a firmer footing, to try to be a nation, the building that came after was bigger and solider and sounder than it would otherwise have been. Can it be thought for one instant that McKim and White, to whom we so largely owe the turning back to the classic manner, came under Richardson's intimate influence without being touched by it? Richardson's sort of radio-activity has a way of making



The Architectural Record, September, 1912.

THE BRIDE'S PORCH — FIRST BAPTIST
CHURCH, PITTSBURGH, PENNSYLVANIA.
CRAM, GOODHUE & FERGUSON, ARCHITECTS.

indelible marks. *He* was a great man in being; *they* were great men in embryo, young and impressionable. They had their own point of view, and they adhered to it with the tenacity which is an attribute of the finest type of genius; but their ideas were enlarged, their views clarified and fixed, and their ideals enriched by association with their great master. And with all the daintiness of their detail, more especially at first, they took abroad with them, when they embarked with Mead on their own career, a generous measure of the Discoverer. "*Vogue la Galere!*"—Undoubtedly as time went on Richardson's influence, not consciously as his influence, but as the development within themselves of seeds he had wakened and nourished, though they had been sown in their very being, became more and more manifest in increased largeness of conception and organic simplicity of handling. And it is for those qualities for which we are ever more indebted to McKim, Mead and White (I speak now of the, I hope, permanent *Institution*, eliminating personalities) than we are for their exquisite detail, incomparable as that is. The detail was a part of our heritage,—the largeness was a needed contribution, offered in the first instance by Richardson, continued by them, and complexed with the fineness which was from of old inbred in our architectural sense. And in both these respects, of largeness and of exquisiteness alike, let me recur again for a moment to the personal note, in recognizing the ever potent influence of Mead. He had had no direct or at any rate no close association with Richardson,—he simply did not escape, and being big himself was all the readier to accept, what no one in this country has wholly escaped, whether he would or not,—the contagious largeness of that personality; to maintain which is no derogation from the original power of each member of the great firm, the permanent institution, as I have called it. It only goes to prove, what I began with, that Style in the great sense has little or nothing to do with the "style" (in the small sense) in which a given architect may be working. It is Style in the great

sense that McKim, Mead and White and all others who follow the true faith of architectural development in this country have in common, difficult as it often is to put one's finger on its elements. Style overlies and includes, or may include, a multitude of "styles." And we have now right at hand an example of this,—which brings me fairly to the second stage of my discussion.

There is, I think all will be disposed to agree, a closer affinity, somehow, between the "Gothic" work of Cram, Goodhue and Ferguson (and by the way don't mix up their lovely work with the earlier "Gothic Revival" already alluded to), and the "Classic" work of McKim, Mead and White, than there is between the latter and the work of, say, Palmer and Hornbostel, for example; yet these last, too, are working mostly in a modified classic style,—even more "modified," to use Mr. Cram's word (I think it is his) than his own "modified" Gothic. Of course the truth of the matter is that neither of them is either Gothic or Classic, unless you much emphasize the "modified." Of course they both *have* to be modified, to meet modern conditions. I am not unfavorably criticising but rather praising them, from my own point of view, when I insist on the "modified," as both Mr. Cram and Mr. Hornbostel would surely wish me to do. I take it they use the words "Gothic" and "Classic" as I do, as short cuts. If they don't I beg their pardon. But I must ask the privilege just the same for the purpose of the present analysis. On Gothic read Moore, and you may be convinced—though I am not, wholly, I must confess, by that particular reasoning; as for Classic, he who runs may read. But after all, this is more or less a haggling over terms.

In spite of my original intention to avoid all personal allusions in this paper, I have ventured to mention three firms; this is merely a short-cut method like my "Gothic" and "Classic"; there are many other names that might have answered my purpose almost equally well, and certainly many others that deserve admiring tributes (or the reverse) were this a piece of praise and

blame; but I am merely trying to bring out the general characteristics of our architecture at this time, and its trend. I have quite inevitably named McKim, Mead and White because they stand in a peculiarly representative relation to our art. It is hardly too much to say that we have two lists of Architects—those who *are* McKim, Mead and White men and those who are not,—and the latter list is the smaller. But of course in the former category are included many who have not actually worked with the great firm as well as all of those who have. The list of their lineal descendants, now running into several generations of pupilage, is astonishingly long, and includes many names in the first rank of achievement. And the penumbra of that pupilage is even larger, and quite as distinguished. In the camp of that tradition is vital solidarity nowadays, pretty much, as to essentials. In the other is schism,—nay, confusion worse confounded. But I seem to see two main groups here, among the minority who are *not* McKim, Mead and White men, which for the purposes of this discussion may be identified by the mention of the other two firms I have named. I have, then, mentioned these three firms as each representing a phase of our art now: the first stands for the simple straightforward dignity and beauty of architectural art typified in classic or renaissance feeling, as nearly as may be in an ancient manner; Palmer and Hornbostel represent indeed a pseudo-classic-renaissance type, generally taking the old Roman or Greek forms as a basis, but using them in a well-nigh wholly free and individual way, even mingled with elements from other styles, especially in ornament, which to the taste of the purist are inharmonious with the general architectural scheme and even a superfetation upon it; while Cram, Goodhue and Ferguson represent the Gothic manner, not indeed at all punctiliously as regards archeological correctness, but yet far more so than Palmer and Hornbostel their classic: while less so perhaps than McKim, Mead and White theirs.

I am not a Gothicismist by any manner

of means, if to be a Gothicismist means to advocate the use of pointed forms in our modern work, for general purposes, though I yield to none in admiration for the old 13th century masterpieces. Except for certain special uses such as, for instance, those churchly types to which Cram, Goodhue and Ferguson for the most part confine them, those forms seem to me not naturally expressive of our modern needs and in most cases quite out of key with our life. And yet, for all that, I feel in the psychology of Cram, Goodhue and Ferguson's work a something which in spite of the forms in which it is expressed breathes the genuine American spirit in a striking degree. Perhaps I feel the psychological quality of it all the more keenly for a certain detachment. It has a—what shall I say?—a something catholic about it, even though it be Anglican catholic, and perhaps too pointedly Anglican at that;—but if Anglican, why not, by an easy tradition, American?—that is, in fact, precisely what I am trying to identify,—the American catholic in architecture. I am seeking to ignore mere forms, in order to get at the spirit behind them. The "style" may go,—character must remain. So any work, no matter what "style" it is in, which manages to express broadly enough our national spirit, is American catholic.

Well, then, if I am right in sensing a real kinship betwixt McKim, Mead and White's work and Cram, Goodhue and Ferguson's, it is interesting to ask whether the qualities they have in common can be identified. If they can I take it that we shall be in the way of identifying the dominant quality of our architecture,—the quality which a wholly disinterested observer, say five centuries hence, might see to be characteristic of our age, just as we fix on the essential note of Greek, of Roman, of Byzantine, of Mediaeval work. For undoubtedly these two firms, with their adherents, not only represent two of the most vital forces in our architecture at the present time, but they represent the extremes of divergent choice as to style. Classic and Gothic,—the fight is on between these two, as between no others. If their

special champions have something vital in common, it must be something very American indeed, and more important, for the purposes of the critic, even than their very "styles" themselves. All the more will this be true if we find the same something in the notable workers of strongly marked individualistic tendencies who belong to neither of these schools, if one may call them such, nor in fact to any school, since they stand practically alone,—men like Sullivan, for instance, or the Ponds,—but there aren't so very many of them.

To begin with, Classicists, Gothicists, Byzantinists, Eclecticists,—they all despise the coarse thing, the over-done thing, like poison. Anything like a "shocker" they would avoid assiduously; they are afraid of it as with a religious fear. They would be as ashamed of a lewd architectural thought as an old maid. Refined taste is the thing. And if we are to judge of architectural tendencies by professional successes this tendency has of late become even more accentuated than ever. I suppose the work which has received the most general approval, built within these last few years, is a certain Washington house of Pope's in the Adams' manner, which carries refinement one point beyond anything else we have. Walk past it almost any day or any hour of the day and you will find some admirer on his knees (figuratively speaking) before it. I admire it heartily myself, but I mention it here merely to point my argument, without attempting to estimate its value as a milestone, or rather as a stepping-stone, to further progress. It is the *dernier cri* of a tendency which is practically universal among our representative architects,—refinement first, last, and all the time. Here we see the colonial tradition more powerful than ever. Character, indeed, as the Greeks held, is Fate. Plymouth Rock is still our backbone. But, you say, how about those others who are using classic as a base, yet who are farther from the representative classicists than are the Gothicists themselves?—Ah! they are perhaps the exception that proves the rule!

But, now, that word Refinement,—it

is an extremely "refined" word. I have used it to fix a notable quality, good or bad,—good *and* bad,—which seems to distinguish American architecture from that of most other countries nowadays. I don't wholly like the word,—it has connotations somewhat too feminine. I have used it, perhaps, often enough. It has carried us far; let us not force a willing horse. If we could only find a more robust word—for a greater thing.

And any way it isn't only one quality we are looking for,—it takes more than one thing to make up the American Catholic. Surely in addition to the restrained delicacy which was so characteristic of the colonial work and which, to the extent (and more) that the original stock still colors our civilization, we must recognize as an equally universal property of American architecture that freedom which is traditionally identified with our national life,—partly a thing of origins, partly an ever renewed contribution from the newcomers,—and which is, I take it, a fundamental, actually as well as traditionally, of our character. And then again we cannot fail to acknowledge a law-abidingness, a sane and persistent respect for precedent, which is wholly consonant with that high type of intellectual courage, the courage to be wholly one's self even in acknowledgement of indebtedness to forerunners. The small type of original dares not place himself alongside the elder great; he strives therefore for a new kind, and ends as like as not, in mere eccentricity. The larger original, and especially the greatest, is not afraid to stand with the elders, fully aware that his own mind will at the same time gain from close relationship with theirs and yet all the more clearly separate itself and hold its own against them as a background. Many of our best men have that kind of courage; perhaps none deserves to be called best who does not possess it. In any case I feel that it has been a distinguishing quality of all our work best worth remembering and treasuring, and that it is and must in the nature of things be a quality inherent in all permanent art.

I was seeking for a word to group



The Architectural Record, June, 1911.

ENTRANCE DETAIL—RESIDENCE OF
MRS. S. R. HITT, WASHINGTON, D. C.
JOHN RUSSELL POPE, ARCHITECT.

these qualities under. Refinement, freedom, respect for precedent, courage,—these I think make up as aggregates the mere parts of that particular kind of reinforced concrete which I have called the American Catholic. They are all aristocratic virtues, and they deserve an aristocratic name. What better one is there than—Distinction? Distinction is, after all, what we are all after. In all the wholly successful American work, *that*, we feel, is the representative beauty, which we all recognize the value of and which we struggle consciously or unconsciously to attain in our work, however far short individual achievement may fall. Here in America, just where, *a priori*, you might least expect to find precisely that ideal, you find it most securely horsed and off for the crusade. Compare the representative American work of today with corresponding work abroad. You will find here a tireless and persistent search for the fine thing as the keynote of design, as against the venturing into new fields over there, especially on the Continent. I know, there are reasons, sound reasons, for this; they have their fine old examples, they are tired of imitating them, they want to try their wings, and they often go far afield to do it; but the fact remains as I have said that we are on the whole the conservatives, they are the free lances. L'Art Nouveau, that iconoclastic socialism, not to say anarchy, of art, has gone like wild-fire from end to end of Europe these last years, while we are on the still hunt for aristocratic Distinction. I'm not saying that we always bag the game or that we have

all the advantage in this comparison by any means. I dare say Europe may in some ways be in advance on the trail to the future, and may have that to offer even in the Art Nouveau which we must needs take over if we are to join the world movement onward. They seem to be already in the aeroplane age of architecture, while we are still content with automobiling. But, as a prejudiced observer, I may be permitted, I hope, to express the conviction that on the whole we are on the surer ground,—on the ground, I should say, instead of in the air. With painting it is much the same. Europe is tired of saying and doing the same old things, and bursts with desire to get on; America distrusts and hates more and more the crudities and anxieties of revolt and yearns for the halcyon peace of establishment. We could almost stand a State religion, I sometimes think (providing it were catholic enough), and we are actually within gun-shot of a State architecture. Faguet brings out capitally the necessity of incorporating the aristocratic principle in democracy, just as Croly does in another way; believe me, it is even more vital in architecture.

"Nuns fret not at their convent's narrow room,"—In the midst of freedom, "Form, give us form!" we cry,—and too often we get—mere Standardization. *There* is our Scylla over against the Charybdis of License. After all, we must steer a mean course, keep mid-channel, if our ship is to come in. And there is no rule for sailing a ship except—to sail it. Above all, keep on deck!



Photograph by George R. King.

GREEK THEATRE FOR THE UNIVERSITY OF CALIFORNIA.
JOHN GALEN HOWARD, ARCHITECT.



DETAIL OF LOGGIA—FIRST CHURCH OF
CHRIST, SCIENTIST, LOS ANGELES, CAL.
ELMER GREY, ARCHITECT.



THE FIRST CHURCH OF CHRIST, SCIENTIST, LOS ANGELES, CAL.
Elmer Grey, Architect.

ON THE DESIGN OF CERTAIN MODERN CHURCH EDIFICES

BY
ELMER GREY



It should be an axiom that religious organizations should always build well. The commercial spirit of our age is so inclined to be a mad race for the "almighty dollar," and commercial structures are so often built with the idea of obtaining the most show for the least money that when religious organizations build they should show that their aims are higher. The trend of preaching or sermon in all churches is for the things of lasting value, the real as against the seeming; so when a church builds, it

should show that it believes in putting such preachments into practice, that it demands the real in architecture instead of that which only seems so. Many people of taste and discrimination will judge it thus, by its acts rather than by its words.

It is not always easy for a church to build well, however. For one reason, its governing body may be made up largely of the kind of men who are accustomed to build cheaply in their private life, and who have not been educated by environment or training to appreciate the value of building better. Thus at the start, a campaign of education is often necessary, and to accomplish results from it quickly enough to be of use in the problem at hand, is often difficult. All sorts of ob-



DETAIL OF LOGGIA, FIRST CHURCH OF CHRIST, SCIENTIST, LOS ANGELES, CAL.
Elmer Grey, Architect.

stacles may be thrown in the way which obscure the issue and render the work harder than it otherwise would be. As the Christian Science Monitor once put it,

"There is a perpetual battle on between the pseudo and the real. Such victories for a higher standard (in architecture) as have been won are due to the intelli-

gent minority. A prosaic, unimaginative, utilitarian majority have yet to be won to desire finer art in architecture and have yet to be taught the rudiments, once the desire is aroused."

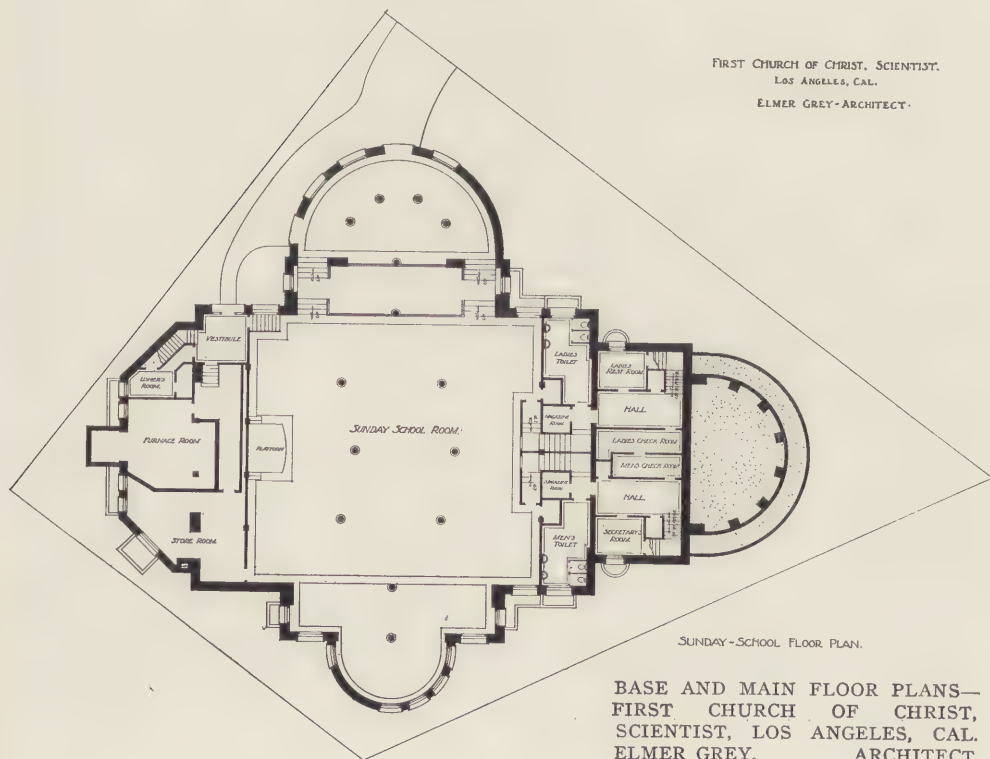
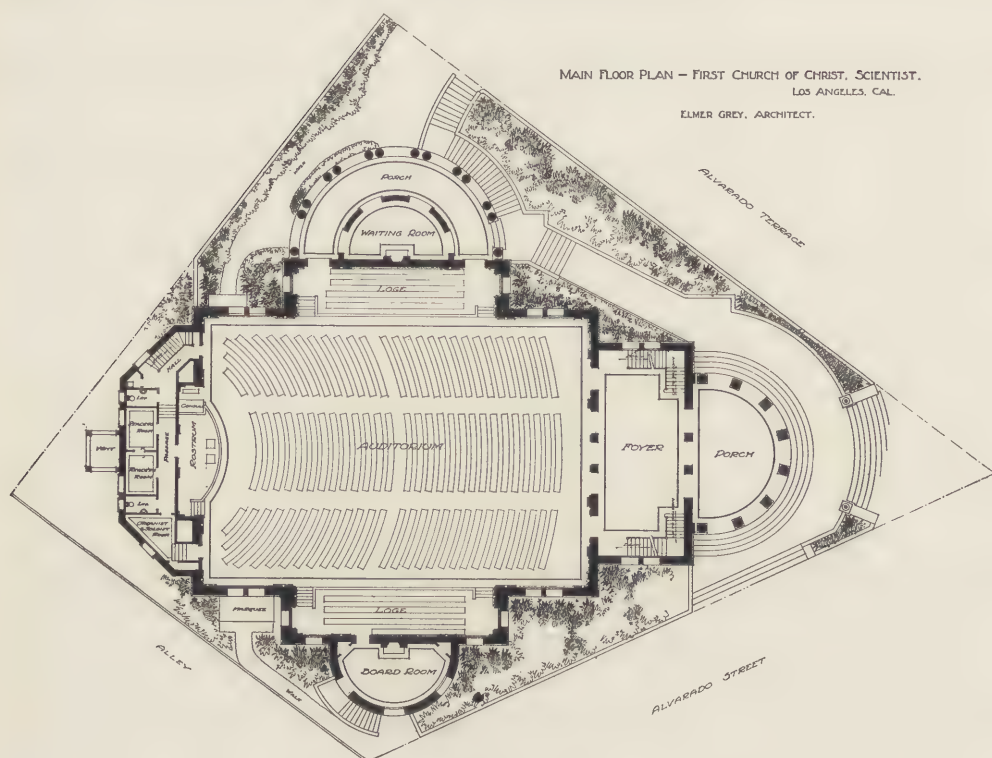
The churches which have, both in the past and the present, succeeded best in the quality of their architecture are those which have followed closely along orthodox architectural lines. This is because excellence in architecture, as in other things, comes from a gradual process of development, from an improvement of good things already done, rather than from a sudden bursting forth of some fine new thing. The church architecture of the remote past, by such a process of development and adaptation to the varying conditions of different countries finally culminated in the splendid Gothic, Romanesque and Renaissance cathedrals of England, France and Italy; and these wonderful monuments have in their turn provided the inspiration for most of the best church architecture of the present day.

Some new church denominations have, however, come into the field during the last decade or two, which have brought with them the necessity for departing radically from these long accepted church types. The building activity among some of these denominations has been so great as to make them a strong influence affecting the architectural aspect of our cities. The plans of church edifices like those of other buildings are determined very largely by the habits of their congregations, and the forms of service carried on within them; and some of these newer denominations have customs and forms of service which are radically different from those of the orthodox churches represented by the cathedrals. These different forms and customs necessitate the designing of a different type of church edifice, and this different type constitutes practically a new architectural problem.

All Christian denominations endeavor to pattern their work after that of the early Christians. It might consequently



THE OFFICE. FIRST CHURCH OF CHRIST, SCIENTIST, LOS ANGELES, CAL.
Elmer Grey, Architect.



BASE AND MAIN FLOOR PLANS—
FIRST CHURCH OF CHRIST,
SCIENTIST, LOS ANGELES, CAL.
ELMER GREY,
ARCHITECT.

be supposed that the newer denominations could look for their architectural models to the plans used by the early Christians, and thus get back to fundamentals. But present-day social conditions and the practical requirements of all present-day forms of worship are so totally different from those of the early Christians that this is impossible. It is Christian churches of a later date, therefore, which must be used, but with such modifications of plan and exterior as are necessitated by the different forms of service carried on within them. Of just what these modifications consist depends upon the requirements of the individual congregations. Two points should, however, be constantly borne in mind. One, that the architecture of the great cathedrals is the result of centuries of painstaking thought, rare artistic ability, and much conscientious endeavor, that as a consequence it reached a point of perfection which in its way can scarcely be excelled, and that this high degree of excellence should prompt us to look to and study

it continually as a great object lesson. The other point is that notwithstanding this fact, where there are new and very different conditions to meet today, and sensible provision for which necessitates radical departures from the cathedral type of church, such departures should be made unhesitatingly. For it is by meeting new needs with newly devised ends that advance has always been made in any line of endeavor. We should, in other words, strive to profit by the lessons of the past, as by an extremely



THE ENTRANCE ELEVATION, FIRST CHURCH OF CHRIST, SCIENTIST, LOS ANGELES, CAL.
Elmer Grey, Architect.



THE AUDITORIUM, TOWARD ROSTRUM—FIRST CHURCH OF CHRIST, SCIENTIST,
LOS ANGELES, CAL.
Elmer Grey, Architect.

valuable inheritance, but at the same time we should endeavor to keep our minds free from danger of being fettered by it.

One of the distinguishing and also one of the most beautiful features of the old cathedral plans is a long narrow nave, flanked by generous side aisles, the two separated by rows of intervening columns. In many modern churches, however, all members of the congregation wish to hear the sermon and see the rostrum, and such a church plan consequently is impracticable for the purpose, without considerable modification. A broader nave and much narrower aisles in which latter are either no seats or but a few used for overflow purposes, are virtually necessary.

Again, the interior of some of the great Renaissance cathedrals, such as St. Peter's and St. Paul's, is marked by a dome, but this feature has so frequently been found to interfere with good acoustics that it is now being used less and less.

Many modern congregations require a

much larger vestibule or foyer than that to be found in the cathedral models. This they use for the purpose of assembling after service to meet and chat with their friends. A foyer large enough to fulfill such a requirement is another marked departure.

Whether it is because these various changes from the historic church plan have so often resulted unfortunately to the exterior appearance of the new edifices or whether it be some other reason, at any rate the attempt has frequently been made to start their planning with an exterior of some other kind of building than the cathedral type and then to adapt a practical interior to it. The result in almost all cases has been disastrous in one way or another, either to the interior or to the exterior, and for the reason that it is just the reverse of the method which should be employed in good planning. As a writer in the *Architectural Record* once put it, it is an attempt "to ignore the requirements as a basis for the archi-

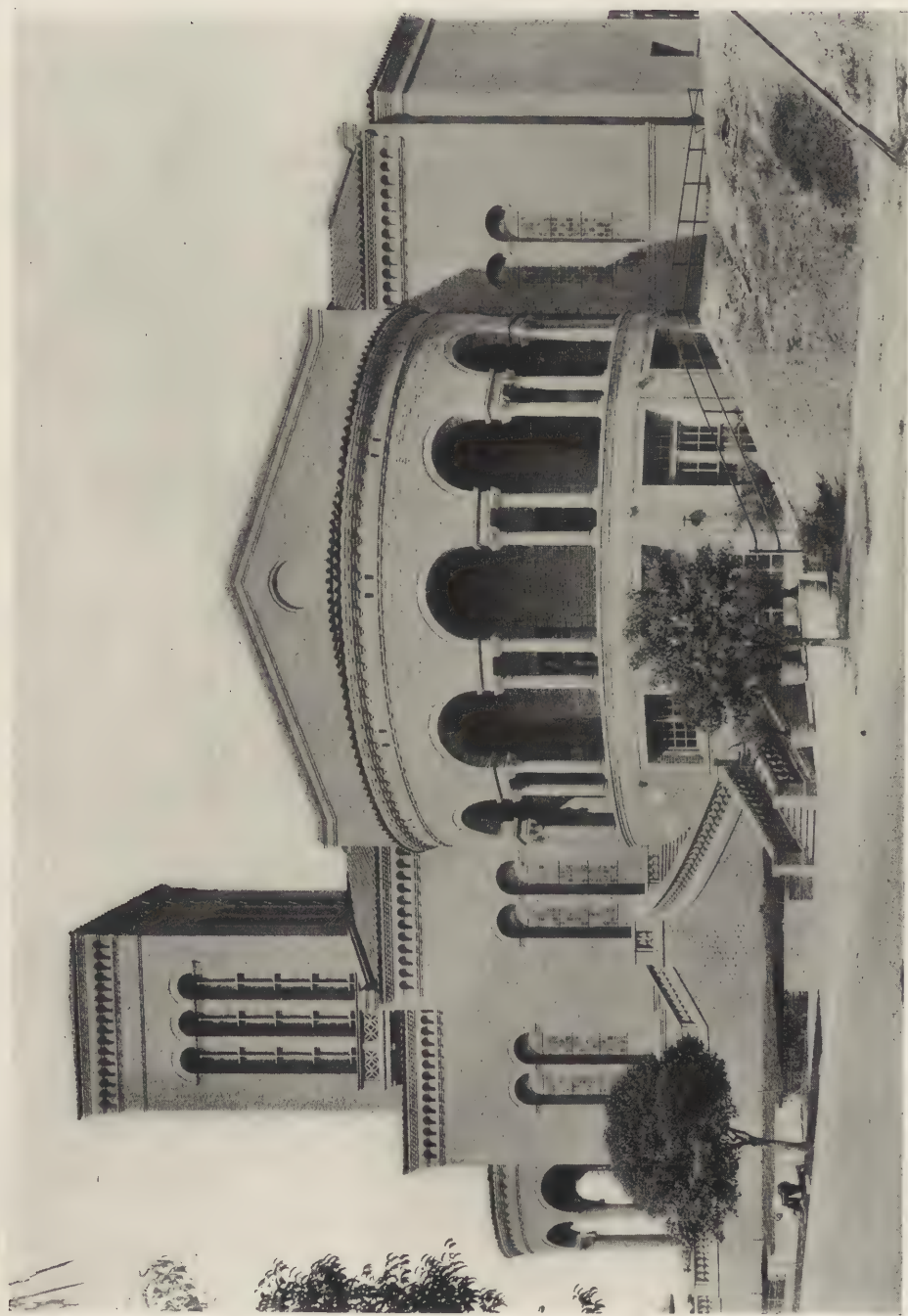
ture of the building, to put up a front which is not a countenance, but a mask—an assemblage of features of historic architecture * * * compiled into a pleasing, impressive result * * * mechanically adjusted to the interior behind it. The apartments for the sake of which the building exists, instead of being made the basis of the architecture, instead of being expressed, are suppressed, hidden behind the mask or the masquerade of monumental architecture, itself entirely irrelevant to them." The historic styles of architecture which have endured and which we admire as having distinct character are the result of people during certain periods of the world's history having planned and built according to the practical requirements of their day. We in our time, therefore, in starting to plan a church or any other building, for that matter, should likewise decide first what our practical requirements are and then make our plan accordingly. The exterior style, influenced, of course, and unavoid-

ably, by the styles which history has handed down to us, will then follow naturally. Indeed, the process of thus first assembling the practical requirements into the form of a plan will usually go far toward deciding what the nature of the exterior or its architectural style will be.

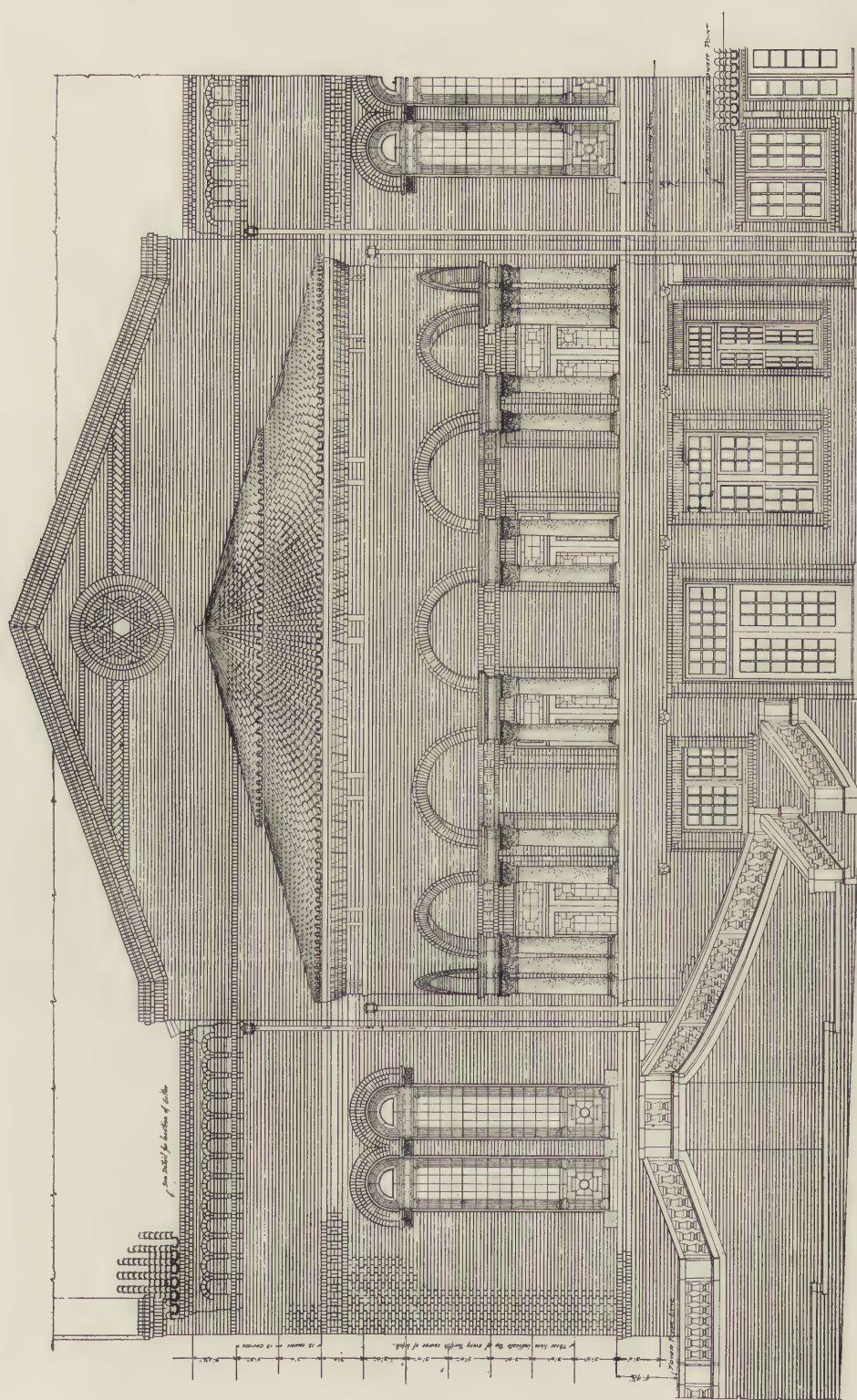
The make-up of the governing body of a church, where the governing power does not reside in one man, is often one of the most important factors that make for the success or failure of church building. In the case of a one-man power, such as a bishop, for example, if he be possessed of wide culture and broad experience as such men often are, this side of the problem is adequately taken care of. If, however, the church be represented by a body of men and women, such, for example, as a Board of Directors, the problem is very different. If they have not been chosen especially for the building task, they may or may not be possessed of the proper qualifications. Previous building experience among them



THE AUDITORIUM, TOWARD ENTRANCE—FIRST CHURCH OF CHRIST, SCIENTIST.
LOS ANGELES, CAL.
Elmer Grey, Architect.



SIDE ELEVATION—FIRST CHURCH OF CHRIST, SCIENTIST,
LOS ANGELES, CAL. ELMER GREY, ARCHITECT.



From the Architect's Drawing.

DETAIL—PORTION OF SIDE ELEVATION, FIRST
CHURCH OF CHRIST, SCIENTIST, LOS ANGELES, CAL.
ELMER GREY, ARCHITECT.

may be of advantage in some cases, but in many others it is not as important as other qualifications. For the technical knowledge necessary to make the plans correctly, and to build well, will be forthcoming from the architect if he has been selected wisely. He may make mistakes, as all of us sometimes do, but they are not apt to be as grievous ones as would be made if the advice of laymen in such matters were followed. Indeed, if a layman be possessed of only a little technical knowledge without a corresponding appreciation of its limitations, the little he knows may actually be a detriment to the work, for the reason of its inspiring an over-confidence in his opinion among his fellows. The most important qualifications, therefore for those to have who direct such enterprises are such as will enable them to do good "team-work" with their architect, intelligently criticising his designs, guiding him in broad policies affecting the interests of the church, and following him when his technical training warrants his taking the lead. Such qualifications are made up partly of good business judgment, partly of that intelligence which Dr. Charles W. Elliott has said is indicated by confidence in experts, and partly of a trained discrimination between what is good and what is poor in architecture. Regarding this latter qualification the *Christian Science Monitor* once had an editorial which, although it was entitled "The Intelligent Reading of Pictures," applies equally well here because it applies also to the reading of architecture. With but slight transpositions in order to make it refer to architecture, it read in part as follows: "Most of us may do well to consider how little time we have given to preparing ourselves to read this language of mass, of proportion of harmony. These things are not the mere jargon of artists (or architects). They have all as real a meaning as the laws of language, without which men were unable to speak two intelligible words. Men could not understand one another in speech if all did not recognize common laws of expression in sound. They do not understand a speech which they have not taken the trouble to learn. Then let

us not turn away from the silent building before us and affirm that it is void of meaning just because we cannot read the language."

"Architectural forms are symbols as truly as the vocables of speech or their written symbols are; they need to be translated into thought just as surely as words must be. We cannot read them by a casual glance any more than we could read a foreign tongue in that way. If we study a page of an unknown language even without a dictionary, little by little, we may find printed signs that are like something in our own language, and it is said that persons have learned Latin in this way—just by poring over a Latin book without aid of grammar or dictionary. So if we study works of architecture faithfully we shall discover little by little things that relate themselves to our former experience of beauty, and in time we shall understand what the architect is trying to tell us."

Now, this kind of trained discrimination in architectural matters, coupled with good business judgment, may or may not happen to be possessed collectively by the governing body of a church confronted with the task of erecting a new edifice. The individual members of such a body may or may not have been trained for such a special task. To remove such an element of chance, one particular church adopted the method of electing at the very beginning of their planning operations, a Building Committee chosen with special reference to its fitness for such work and to serve throughout the entire planning and building operations. The plan worked out so admirably that it would be well if more churches adopted a similar one. With such method, if some of the members of an existing governing body happen to be the best fitted for the task, that fact will appear in the election, and such members may then become members of the Building Committee as well. If, however, others are better fitted, then that fact will appear. Such a Building Committee should be chosen early enough to have a voice with the main governing body in the selection of the architect, for it is with them that it is afterward to do its work.



DETAIL OF ENTRANCE, FIRST CHURCH OF CHRIST, SCIENTIST, LOS ANGELES, CAL.
Elmer Grey, Architect.

Such early election will also give the Committee the opportunity to be familiar with every detail of the plans from their earliest inception on, which it is quite desirable that it should be.

There are various methods of selecting the architect for a church, some of which are better than others. One method which would not here be mentioned were it not for the fact that it still is frequently followed, is to let it be known

that plans are wanted for a church edifice and to invite or encourage architects to submit sketches for it gratuitously. Any good business man should see at once that this method is one not likely to bring the best results. A sketch or plan is a thing of value only as it represents time and thought. Almost any church problem requires considerable thought before a plan can be made for it that will be of much value. Some par-

ticularly complex problems require a very great deal of that commodity to even partially solve them. An architect's work consists of making plans and supervising the erection of buildings, and if very much of his time and thought are given up to making sketches gratuitously, it should be evident that they must necessarily be taken from other work which he has already been commissioned to do. No professional man whose services are enough in demand to keep him busy can afford thus to take time from his regular work and give it away. If he does in one instance, it cannot be worth much in another. Architects of mediocre ability, therefore who are unable to obtain enough work on the strength of their reputation and who have time on their hands are usually the only kind who will agree to such methods. Those kind of architects are almost the only kind who are ever secured that way.

Another method of selecting an architect is by competition. For the same reason, however, that few reputable architects will make sketches gratuitously, few also will enter a competition in which there is not some provision made for adequate remuneration for the time spent on the work in case the competitor is not given the award. Such remunerative scheme is only fair for other reasons. Not only are many drawings in a competition likely to aid the owner in making his decision, but frequently some ideas shown in drawings other than the successful one will be embodied in the final plans and so are of definite value in that way and should be paid for. The necessity for remunerating the competitor if competent architects are to be secured, makes the competitive system expensive. In order, however, to make it as fair as possible in cases where it is adopted, the American Institute of Architects has instituted a program under which among its members competitions shall be conducted. It is not the aim of such a program to dictate to the owner the course he is to pursue, but rather to assist him by advising the adoption of such uniform methods as experience has proven to be just and wise, and productive of the best results.

So important does the adoption of

such program appear to members of the Institute that they do not take part in competitions except under such rules. Considerable time is usually required to prepare a program in such a manner as to make it fair to all concerned, and since it must be prepared especially for each problem, the competitive system thus becomes a relatively slow as well as an expensive one. Other features of the system are discussed in a pamphlet issued by the American Institute as follows:

"The interests of the owner may be seriously prejudiced by admitting as a competitor any architect who cannot in advance establish to the satisfaction of the owner his competence to design and execute the work."

"It is sometimes urged that by admitting all who wish to take part in competition, some unknown but brilliant designer may thus be found. If the object of a competition were a set of sketches, such reasoning might be valid. But sketches give no evidence that their author has the natural artistic ability to fulfill their promise, or that he has the technical knowledge necessary to control the design of the highly complex structure and equipment of a modern building or that he has executive ability for large affairs or the force to compel the proper execution of contracts. The attempts to defend the owner's interests by associating an architect of ability with one lacking in experience has generally been found to be unsuccessful in practice."

"As an incident, a good preliminary scheme may sometimes be obtained, but the Institute is of the opinion that competitions are in the main of no advantage to the owner. It therefore recommends that, except in cases in which competition is unavoidable, an architect be employed by direct selection upon the sole basis of his fitness for the work."

This recommendation that the architect be selected with reference to his "fitness for the work" suggests, of course, the best method. The young man should be given a chance, but experience is so important a requirement in building operations that, as a rule, he should have it only as he has won it, by proving on smaller pieces of work his fitness for larger and still larger undertakings.

SOME RECENT
CALIFORNIA
ARCHITECTURE



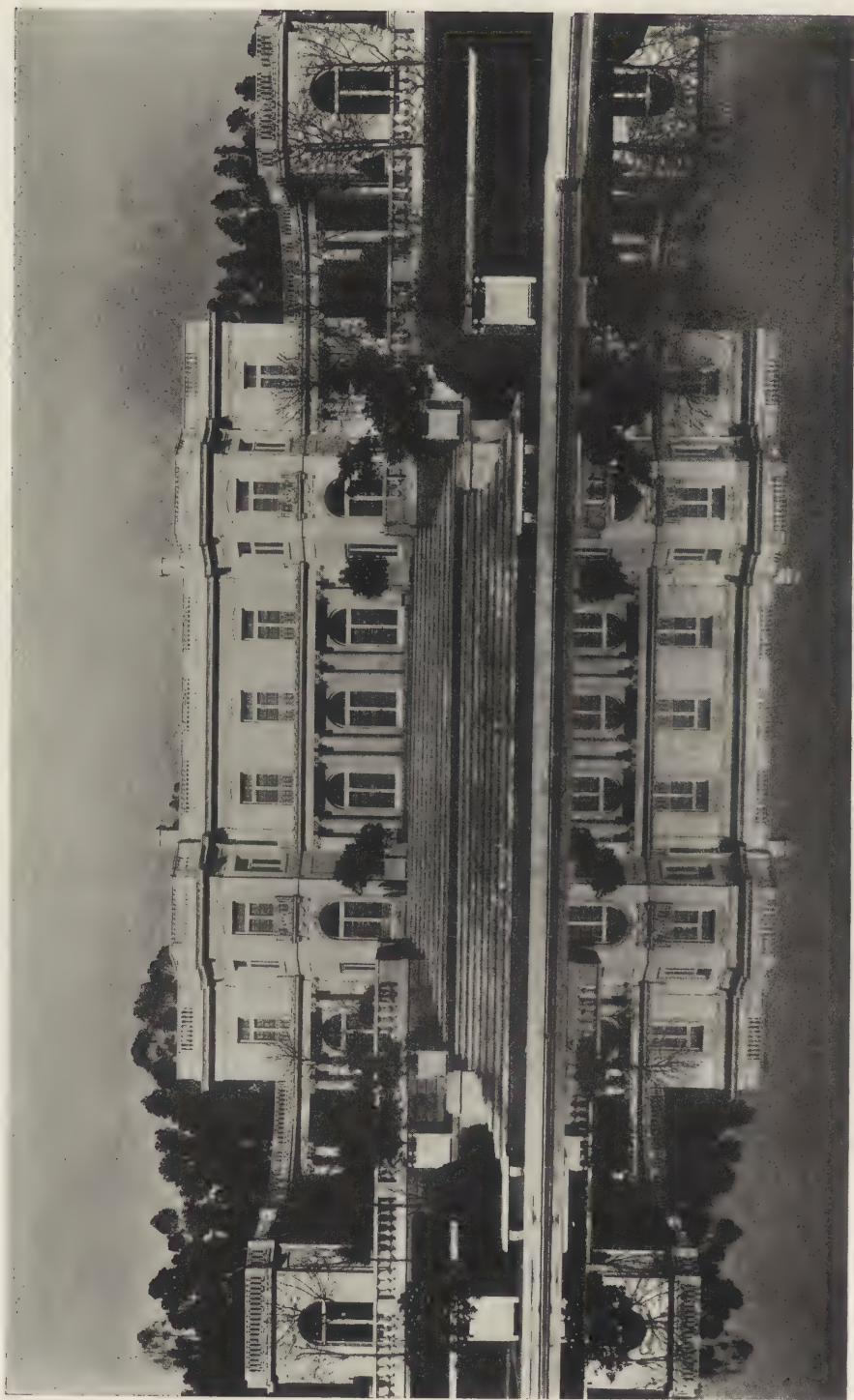
THE THROOP COLLEGE OF TECHNOLOGY, PASADENA, CAL.
Myron Hunt and Elmer Grey, Architects.



RESIDENCE OF H. E. HUNTINGTON, ESQ., PASADENA, CAL.
MYRON HUNT & ELMER GREY, ARCHITECTS.



RESIDENCE OF G. W. WATTLES, ESQ., HOLLYWOOD, CAL.
MYRON HUNT & ELMER GREY, ARCHITECTS.



THE NEWHALL RESIDENCE, BURLINGAME, CAL.
LEWIS P. HOBART, ARCHITECT.



ENTRANCE DETAIL—RESIDENCE OF
DR. CHICHESTER, SAN MATEO, CAL.
LEWIS P. HOBART, ARCHITECT.



ENTRANCE DETAIL—THE EASTON
RESIDENCE, SAN MATEO, CAL.
LEWIS P. HOBART, ARCHITECT.



THE WATES RESIDENCE, COVINA, CAL.
Arthur R. Kelly, Architect.



FIRST FLOOR PLAN,
THE WATES RESIDENCE,
COVINA, CAL.
Arthur R. Kelly, Architect.

SECOND FLOOR PLAN,
THE WATES RESIDENCE,
COVINA, CAL.
Arthur R. Kelly, Architect.

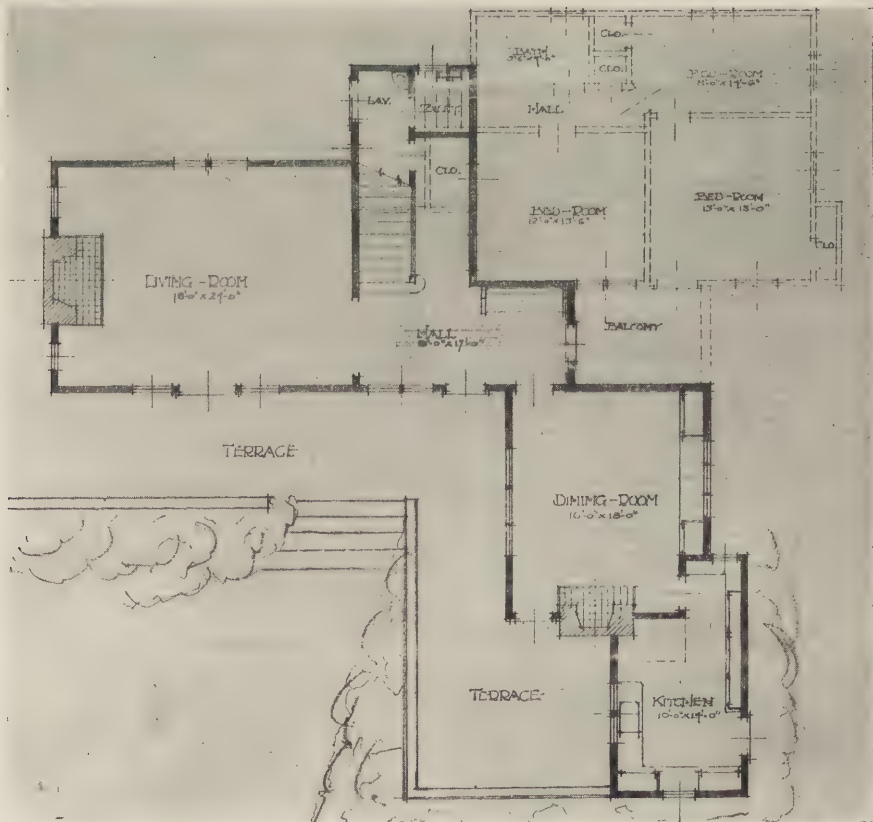




RESIDENCE OF JOHN T. ALLEN, ESQ., HOLLYWOOD, CAL.
Arthur R. Kelly, Architect.



PERGOLA IN THE WATES RESIDENCE, COVINA, CAL.
Arthur R. Kelly, Architect.



RESIDENCE OF JOHN T. ALLEN, ESQ., HOLLYWOOD, CAL.
Arthur R. Kelly, Architect.



DRAWING FOR THE RESIDENCE OF
KATHERINE HOOKER, SAN FRANCISCO, CAL.
WILLIS POLK & CO., ARCHITECTS.



PROPOSED RESIDENCE OF PAUL FOSTER, ESQ., SUISUN, CAL.
Willis Polk & Co., Architects.

NOTES ON THE VARIED WORK OF WILLIS POLK ARCHITECT



BY

C. MATLACK PRICE



GOOD deal has been said and written about versatility. Mr. Chesterton, in discussing the many-sided Stevenson said: "It is an unjust fact that if a man can play the fiddle, give legal opinions, and black boots, he is called an Admirable Crichton, but if he does all three thor-

oughly well, he is apt to be regarded, in the several departments as a common fiddler, a common lawyer and a common boot-black."

Certainly variety is met with in the work of many architectural firms, and sometimes this variety is to be chronicled as "good, bad and indifferent." In such cases it is obviously deplorable that

the architects have not stuck to one type of building, and done that well, fore-swearing other activities.

An architect who ably designs banks is not ordinarily noted for his country houses or for his churches, and yet the reasons for specializing in any one type of building are not, or should not be, very deep-rooted. Architecture is architecture, be it applied to whatsoever sort of structure, and to the intelligent mind the name of a given firm of architects associated with the design of a bank should not drive away the seeker for a country house.

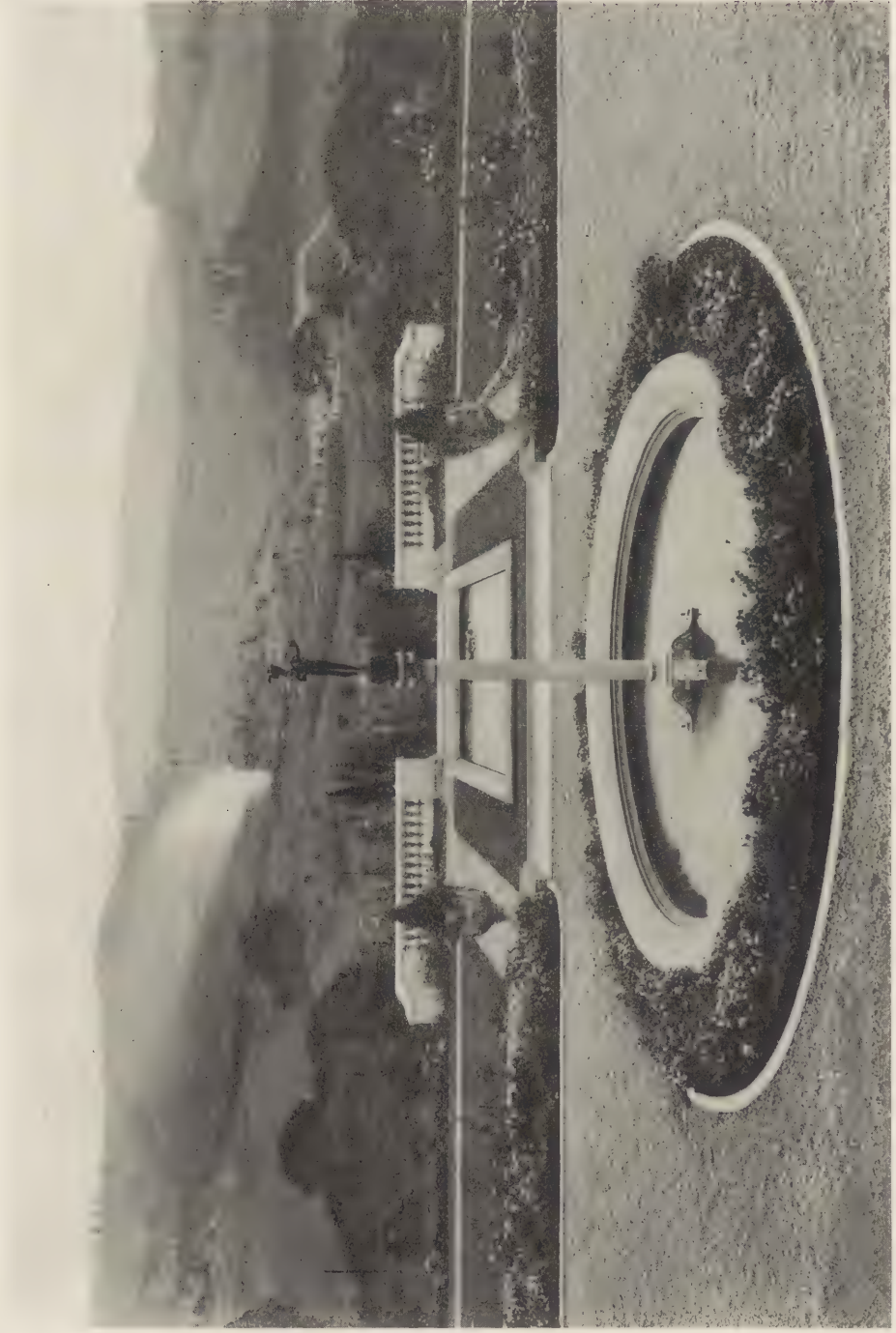
That such should very frequently occur is, as Mr. Chesterton has said, an unjust fact, though here and there an architect, or a firm of architects, surmounts the obstacle of public premise, and bravely carries through a surprisingly wide range of projects.



RESIDENCE OF JAMES K. MOFFIT, ESQ., PIEDMONT, CAL.,
FROM THE GARDEN. WILLIS POLK & CO., ARCHITECTS.



THE GARDEN FRONT, RESIDENCE OF JAMES K. MOFFIT, ESQ.,
WILLIS POLK & CO., ARCHITECTS.
PIEDMONT, CAL.



THE TERRACED GARDEN, RESIDENCE OF
JAMES K. MOFFITT, ESQ., PIEDMONT, CAL.
WILLIS POLK & CO., ARCHITECTS.



TWO GATEWAYS AT ATHERTON, CAL.
Willis Polk & Co., Architects.

And so we find Willis Polk the designer of Banks, Churches, Country Houses, Power Plants, Stables and Gardens, with a blithe facility which must be enviously admired by many less versatile. Apart from the practical significance of this achievement, the architectural significance lies in the fact that the several types of building mentioned above, and illustrated in these pages are each thoughtfully designed and pleasing in their finished appearance.

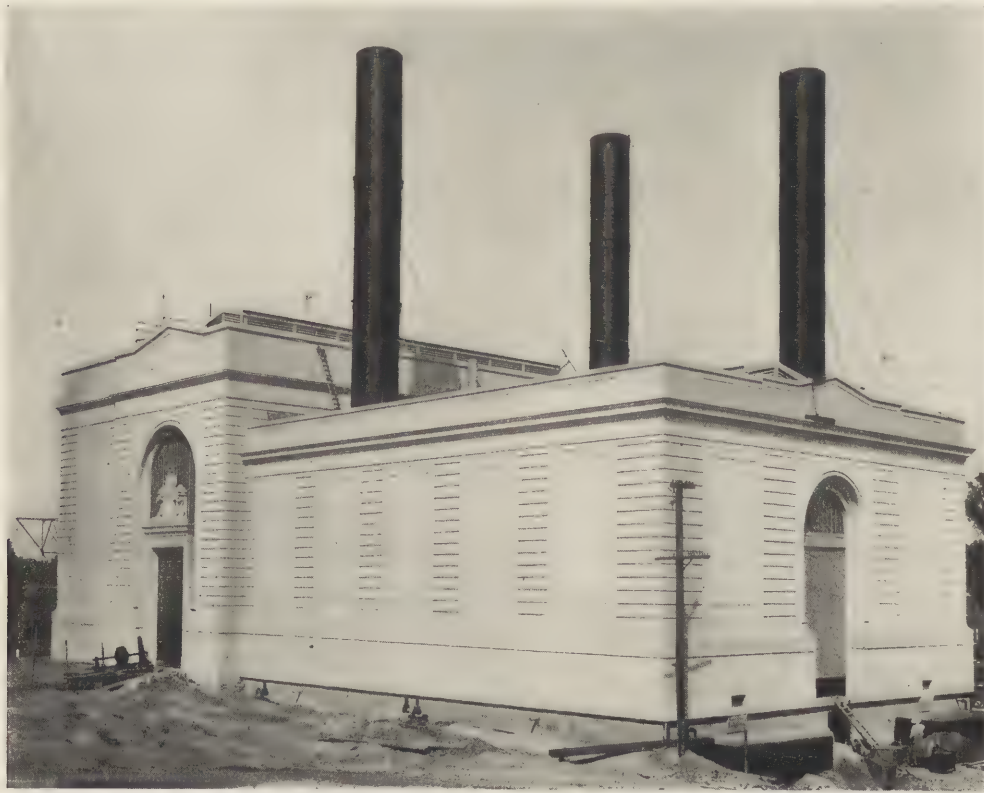
The project for a country house in San Francisco is at once imposing and picturesque—with something of the associated charm of the Alhambra, yet ample semblance of a dwelling. There is thoroughly interesting spontaneity in the composition, and a proper reserve in the elimination of detail which one would expect in a rendering of Spanish-American architecture. In the sketch for the Paul Foster house there is a charming quality of domesticity, albeit the acclaim

for its entire originality of concept is a bit discounted by recollections we have of some work by Albro and Lindelberg.

The Moffit residence is by all means worthy of study, and should be pictured as it will appear when the vines about the house and the planting in the gardens have had time to grow. For a frankly unbalanced arrangement there are yet certain axial niceties which make house and grounds a well-studied and pleasant-appearing unit.

In the gates at Atherton there is a vague suggestion of those old gates of the city of Saint Augustine, in Florida (the oldest remains, I believe, of Colonial architecture in this country), and this severe yet compellingly picturesque quality is in excellent character for California architecture.

The River Station at Sacramento shows the conflict eternal of architecture and utility—the three brutally black stacks making the conclusion almost a



RIVER STATION, SACRAMENTO, CAL.
Willis Polk & Co., Architects.



A STABLE AT BURLINGAME, CAL.
Willis Polk & Co., Architects.

"draw." That there should be any architecture at all in such a building, however, is vastly commendable, and we are reminded of some good work of similar character by the same architect illustrated in *THE ARCHITECTURAL RECORD* in August, 1912. It is doubtful if any other architect has come so near vanquishing the unesthetic in this purely utilitarian type of building, and hence, despite the offensive stacks, high praise.

The slides are changed—two stables appear, one at Burlingame, the other at Atherton, and again there is fitness and appropriateness of design, specially con-

sidered, and felicity of architectural composition in the abstract.

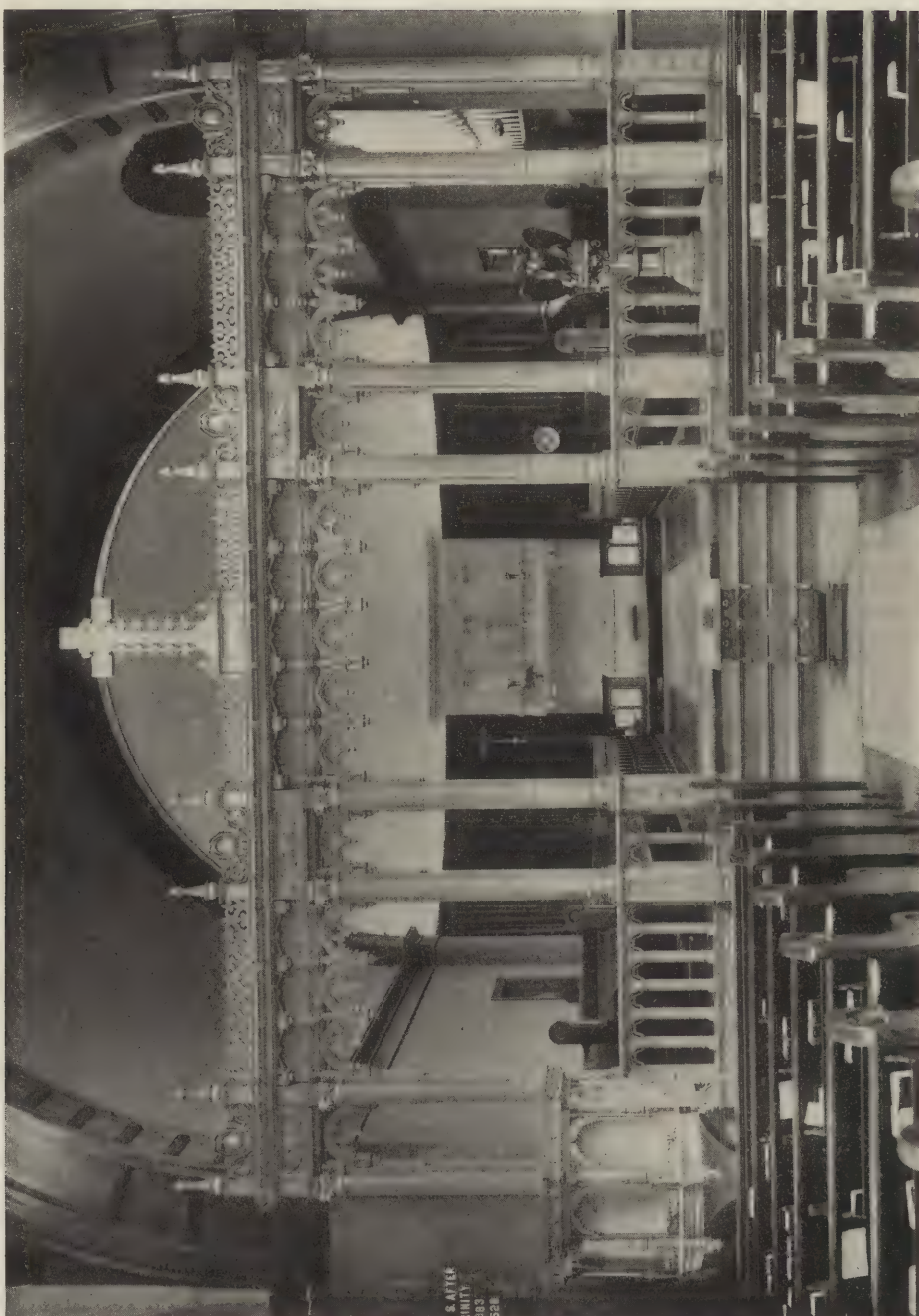
In the National Bank of D. O. Mills and Company, in Sacramento, there is general dignity and pleasant detail. Obviously, it is a bank, bearing all the architectural characteristics which we have associated with banks. The interior is designed in a manner at once business-like and attractive. On the main axis a monumental clock reminds the eye that time is money, and that closing time is placed where all who enter may read. Below the clock yawns the great vault, where the nervous depositor must



A STABLE AT ATHERTON, CAL.
Willis Polk & Co., Architects.



THE ALTAR—ST. MARK'S CHURCH, BERKELEY, CAL.
Willis Polk & Co., Architects.



THE ROOD-SCREEN, ST. MARK'S CHURCH, BERKELEY, CAL.
WILLIS POLK & CO.,
ARCHITECTS.



THE PULPIT AND ROOD-SCREEN,
ST. MARK'S CHURCH, BERKELEY, CAL.
WILLIS POLK & CO., ARCHITECTS.



ENTRANCE DETAIL—NATIONAL BANK OF
D. O. MILLS & CO., SACRAMENTO, CAL.
WILLIS POLK & CO., ARCHITECTS.

find reassurance in the facility thus offered him to study the amazing mechanism of the great circular door. Thought was evidently expended in the design of the square Renaissance columns of the cage-screens, and in the central tables, where street-lamps in miniature contribute significantly to the very "architectural" character of the whole interior.

In the church work there is much technical nicety, without some of the "feeling" which one associates with things

ecclesiastical. The hand of the layman seems to predominate, and there are absent certain spiritual qualities herein more to be felt than defined.

If "comparisons are odious," one can readily imagine criticisms as being reckoned considerably worse under certain circumstances, and it is not intended to imply any captious point of view which might befog a really sincere appreciation of the individual and collective merit of these examples of a successfully versatile architect's work.



THE NATIONAL BANK OF D. O. MILLS & CO., SACRAMENTO, CAL.
Willis Polk & Co., Architects.



INTERIOR—NATIONAL BANK OF D. O.
MILLS & CO., SACRAMENTO, CAL.
WILLIS POLK & CO., ARCHITECTS.



DETAIL OF CLOCK AND HEAD OF VAULT DOOR—
 NATIONAL BANK OF D. O. MILLS & CO., SACRAMENTO,
 CAL. WILLIS POLK & CO., ARCHITECTS.



DETAIL OF SCREEN AND GATE—NATIONAL BANK
OF D. O. MILLS & CO., SACRAMENTO, CAL.
WILLIS POLK & CO., ARCHITECTS.



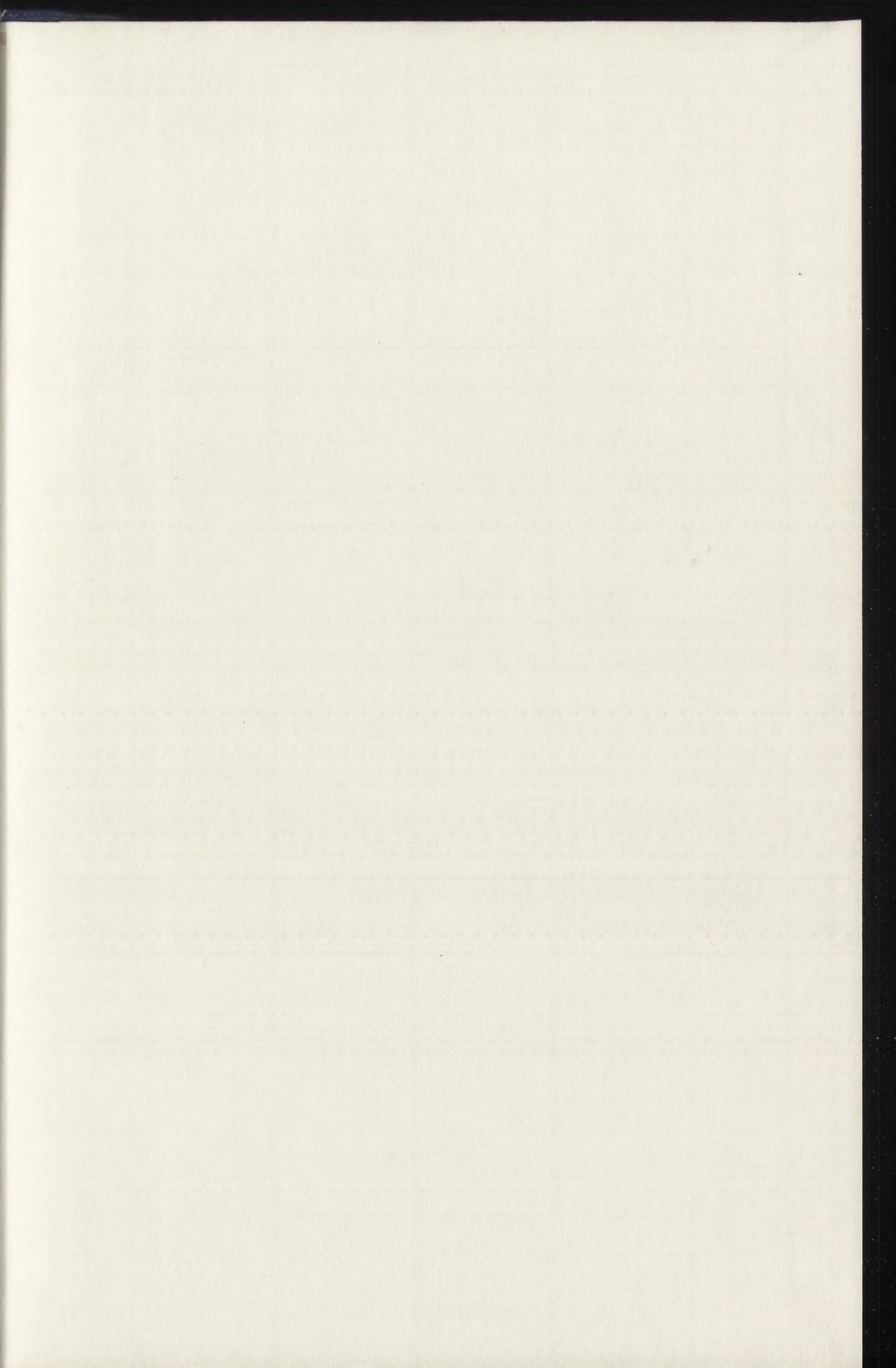
DETAIL OF TABLE LAMP—NATIONAL BANK
OF D. O. MILLS & CO., SACRAMENTO, CAL.
WILLIS POLK & CO., ARCHITECTS.



DETAIL OF TABLE WITH LAMP STANDARD—NATIONAL
BANK OF D. O. MILLS & CO., SACRAMENTO, CAL.
WILLIS POLK & CO., ARCHITECTS.



ENTRANCE, FROM WITHIN, THE GREENWOOD MISSION INN,
RIVERSIDE, CAL. ARTHUR B. BENTON, ARCHITECT.



GETTY CENTER LINRARY



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